



8th International Conference on Multi-Disciplinary Research Studies & Education

# **ICMDRSE 2025**

22<sup>nd</sup>-23<sup>rd</sup> May, 2025 | Kuala Lumpur, Malaysia



### Organized by

Manipal GlobalNxt University Malaysia, Multimedia University (MMU), Malaysia, SEGi University & Colleges, Malaysia & IFERP Academy-Malaysia Society











 $8^{th}$  International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE-2025) Kuala Lumpur, Malaysia

Copyright © 2025 by IFERP Academy - Malaysia Society. All rights reserved.

Copyright and Reprint Permission

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written and otherwise are considered by the contraction of the contrapermission of the publisher.

ISBN 978-93-92104-81-7

This edition is produced in India and is intended for worldwide distribution. However, no part of this publication may be exported without the prior permission of the publisher, IFERP Academy - Malaysia Society.

### Organizer



### Academic Partner











# Table of Contents

Preface	<b>V</b>
About ICMDRSE 2025	vi
About IFERP Academy	vii
Message from Dignitaries, IFERP	viii
About Speakers	x
Organizing Committee	xxxv
Abstract's Index	xxxvii







# **Preface**

We are delighted to extend a warm welcome to all participants attending 8<sup>th</sup> International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE-2025) organized by Manipal GlobalNxt University-Malaysia, Multimedia University (MMU)-Malaysia, SEGi University & Colleges-Malaysia and IFERP Academy-Malaysia Society on May 22<sup>nd</sup>-23<sup>rd</sup>, 2025 at Corus Hotel Kuala Lumpur, Malaysia. This conference provides a vital platform for researchers, students, academicians, and industry professionals from all over the world to share their latest research results and development activities in the field of Research Studies and Education. It offers delegates an opportunity to exchange new ideas and experiences, establish business or research relationships, and explore global collaborations.

The proceedings for ICMDRSE-2025 contain the most up-to-date, comprehensive, and globally relevant knowledge in the field of Research Studies and Education. All submitted papers were subject to rigorous peerreviewing by 2–4 expert referees, and the papers included in these proceedings have been selected for their quality and relevance to the conference. We are confident that these proceedings will not only provide readers with a broad overview of the latest research results in Research Studies and Education but also serve as a valuable summary and reference for further research in this field.

We are grateful for the support of many universities and research institutes, whose contributions were vital to the success of this conference. We extend our sincerest gratitude and highest respect to the many professors who played an important role in the review process, providing valuable feedback and suggestions to authors to improve their work. We also extend our appreciation to the external reviewers for providing additional support in the review process and to the authors for contributing their research results to the ICMDRSE-2025.

Since January 2025, the Organizing Committees have received more than 400+ manuscript papers, covering all aspects of ICMDRSE-2025. After review, approximately 70+ papers were selected for inclusion in the proceedings of ICMDRSE-2025. We would like to thank all participants at the conference for their significant contribution to its success.

We express our gratitude to the keynote and individual speakers and all participating authors for their dedication and hard work. We also sincerely appreciate the efforts of the technical program committee and all reviewers, whose contributions made this conference possible. Finally, we extend our thanks to all the referees for their constructive comments on all papers, and we express our deepest gratitude to the organizing committee for their tireless work in making this conference a reality.



## About 8th ICMDRSE 2025

 $8^{th}$  International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE-2025) is a vibrant platform that brings together scholars, educators, and researchers from a variety of disciplines. It is a hub for exchanging innovative research, investigating diverse educational practices, and fostering multidisciplinary exchanges. ICMDRSE-2025 conference will take place on the  $22^{nd}$  and  $23^{rd}$  of May 2025 in Kuala Lumpur, Malaysia. Organized by The IFERP Academy, this conference intends to spark lively debates, advance novel approaches in research, and promote excellence in education across all disciplines. This event represents a priceless chance for intellectual development and scholarly engagement, with a focus on expanding knowledge and advancing multidisciplinary research.

The conference theme "Applications in Multi-Disciplinary Research Studies: Technology and Innovation for Sustainable Learning" represents a collaborative place where multiple academic subjects interact. It fosters cross-disciplinary conversation by providing a place for the sharing of ideas and techniques

This theme invites people to explore the connections between various subjects and underlines the value of different points of view in promoting innovation and enhancing the educational landscape.

 $8^{th}$  ICMDRSE aims to break down disciplinary silos by bringing together specialists from many subjects to create an exciting environment for collaboration. The theme aims to foster the synergy of ideas, ultimately contributing to breakthroughs in education and transdisciplinary studies.

### **Benefits of Conference**

Access to Expertise
Out-of-the-Box Thinking
Formal Division of Labour
Networking Opportunities
Exchange of Knowledge & Skills
Increased Visibility of Work

### **Objectives of Conference**

Promote Comprehensive Discussions
Showcase Innovation
Foster Global Collaboration
Encourage Cross-Disciplinary Conversations
Inspire New Approaches
Address Challenges
Networking Opportunities



# **About IFERP Academy**

The IFERP Academy is a committed professional organization that advances engineering, science, and technology. IFERP anticipates a global scientific community brought together by digital innovation. This organization puts a great emphasis on promoting research activities, communicating the newest insights, and driving industrial trends. IFERP has built strong networks throughout Asia, the Middle East, Europe, and nations like Iraq, Malaysia, Australia, and more. They have incorporated networking, research support, publications, and other worked in other scientific areas.

IFERP excels in organizing International Conferences that connect researchers worldwide. It holds important international webinars, publishes journals and publications that are indexed by Web of Science and SCOPUS, and provides thorough research assistance and guidance. Engaging in Youth Empowerment projects and encouraging Industry-Institute Interaction are key components of IFERP's goal. The organization is committed to enabling professionals using faculty advancement, skill development, and persistent research and publication initiatives.

### What IFERP Do?

IFERP is committed to improving the professional experience by providing a world-class platform to professionals. Their dedication extends to the following activities:

Academic Resource Accessibility

Diverse Educational Programs

Drive Innovation

Publication & Recognition

### Mission

Upskilling the knowledge hub through technological innovation and excellence for the benefit of humanity

### **Vision**

A Digitally equipped robust, dynamic & swift professional community integrating academics & industry for upgraded technical knowledge implementation



# From Dean, MGU



## **Greetings!**

 ${\it Greetings} \ from \ Manipal \ Global Nxt \ University!$ 

It is with great honour and sincere enthusiasm that I extend my greetings on behalf of the School of Business at Manipal GlobalNxt University, as we proudly join the 8th International Conference on Multidisciplinary Research Studies and Education (ICMDRSE-2025) as an academic partner. Endorsed by Continuous Professional Development (CPD) and scheduled to take place on 22nd-23rd May 2025 in Kuala Lumpur, Malaysia, this distinguished conference offers a vital platform for cross-disciplinary engagement and scholarly exchange.

At Manipal GlobalNxt University, we are firmly committed to fostering academic excellence, advancing research innovation, and promoting meaningful global collaboration. Our engagement with ICMDRSE-2025 is a reflection of these core values and aligns with our ongoing mission to support high-impact research and encourage interdisciplinary dialogue among academics, professionals, and policymakers. We believe that academic forums of this nature are instrumental in shaping the future of education, business, and societal development by cultivating critical thinking, evidence-based inquiry, and international perspectives.

We are especially enthusiastic about the opportunities this conference provides for our faculty members and learners to interact with a diverse community of scholars and practitioners. It is through such dynamic and inclusive exchanges that innovative ideas emerge, and impactful collaborations are forged.

I would like to commend the conference organizers for their vision and commitment to building a platform that transcends disciplinary boundaries and drives scholarly advancement. We eagerly anticipate a productive and enriching conference and are honoured to contribute to this important academic endeavour.

viii



# From Managing Director, IFERP



### Hello All!

On behalf of IFERP & the organizing Committee, I express my hearty gratitude to the Participants, Keynote Speakers, Delegates, Reviewers and Researchers.

The goal of the  $8^{th}$  International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE-2025) is to provide knowledge enrichment and innovative technical exchange between international researchers or scholars and practitioners from the academia and industries in the field of Research Studies and Education .

This conference creates solutions in different ways and to share innovative ideas in the field of Research Studies and Education. ICMDRSE-2025 provides a world class stage to the Researchers, Professionals, Scientists, Academicians and Students to engage in very challenging conversations, assess the current body of research and determine knowledge and capability gaps.

 $8^{\text{th}}$  International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE-2025) will explore the new horizons of innovations from distinguished Researchers, Scientists and Eminent Authors in academia and industry working for the advancements in Studies and Education.

ICMDRSE-2025 hopes to set the perfect platform for participants to establish careers as successful and globally renowned specialists in the field of Research Studies and Education.



# From CEO, IFERP



## Welcome All!

IFERP is hosting the 8th International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE-2025) this year in month of May, 2025. The main objective of ICMDRSE-2025 is to grant the amazing opportunity to learn about groundbreaking developments in modern industry, talk through difficult workplace scenarios with peers who experience the same pain points and experience enormous growth and development as a professional. There will be no shortage of continuous networking opportunities and informational sessions. The sessions serve as an excellent opportunity to soak up information from widely respected experts.

Connecting with fellow professionals and sharing the success stories of your firm is an excellent way to build relations and become known as a thought leader. I express my hearty gratitude to all my Colleagues, Staffs, Professors, Reviewers and Members of Organizing Committee for their hearty and dedicated support to make this conference successful. I am also thankful to all our delegates for their pain staking effort to make this conference successful.





**Dr. Chinmoy Sahu**Vice Chancellor
Manipal GlobalNxt University,
Malaysia

Prof. Dr. Chinmoy Sahu is an accomplished educator. He has been instrumental in creating globally disruptive learning opportunities in the higher education industry over the past two and half decades. Widely recognized for his contributions, he has also been featured in the global list of 'uLektz Wall of Fame' as "Top 50 Thought Leaders in Higher Education". He holds a PhD in Business Administration and has been certified by Harvard Business Publishing for "Teaching with Cases Online". His areas of research are in learning technology and corporate finance. Dr Sahu's work has been widely published in international scholarly journals. He is the Vice Chancellor of Manipal GlobalNxt University and is based in Kuala Lumpur, Malaysia.

BIOGRAPH





Ts. Dr. Goh Wei Wei

Head of Department
School of Computer Science
Taylor's University, Malaysia

# BIOGRAPHY

Associate Professor Ts Dr Goh Wei Wei is currently the Digital Health and Innovations Impact Lab Deputy Director and Programme Director of Bachelor of Information Technology, senior lecturer at the School of Computer Science at Taylor's University. She received her Ph.D. major in E-learning from the University of Derby, UK. She has been in the academic for the past 20 years. Dr Goh Wei Wei has been working on learning, teaching and assessment design strategies, online learning technologies, social media technologies, knowledge management, Machine Learning and Internet of Things research. She emphasised her familiarity with online technologies due to her experience of using them in teaching as she likes to develop technology-rich classrooms. She has been working on various multi-disciplinary projects with the Design School too. Dr Goh Wei Wei has recently won 2 gold medal awards, and 1 bronze medal award in International University Carnival on E-learning (IUCEL) 2022, 1 bronze medal award in Econdev 2022 for her experience in developing technology- rich classrooms initiatives. She introduced Engage VR platform to create an immersive presence in the virtual learning environment to her students. She also let her students have the hands-on experience of using the Oculus Quest 2 and HoloLens to experience Augmented Reality and Virtual Reality. Dr Goh Wei Wei also won a total of 4 silver medals award in Malaysia Technology Expo (MTE) in year 2021 and 2022 for her innovative Internet of Things prototype development related to digital health and innovations. She also won silver medal for Smart Medication Management and Medicine Delivery System in 32nd International Invention, Innovation and Technology Exhibition in 2021. Dr Goh Wei Wei has the practical skills, the hands-on experience and the educational credentials to make a significant difference to the university.





### Dr. Ummi Naiemah Saraih

Faculty of Business & Communication Head of Department, Department of Business, Faculty of Business & Communication Universiti Malaysia Perlis (UniMAP), Malaysia

Associate Professor Ts Dr Goh Wei Wei is currently the Digital Health and Innovations Impact Lab Deputy Director and Programme Director of Bachelor of Information Technology, senior lecturer at the School of Computer Science at Taylor's University. She received her Ph.D. major in E-learning from the University of Derby, UK. She has been in the academic for the past 20 years. Dr Goh Wei Wei has been working on learning, teaching and assessment design strategies, online learning technologies, social media technologies, knowledge management, Machine Learning and Internet of Things research. She emphasised her familiarity with online technologies due to her experience of using them in teaching as she likes to develop technology-rich classrooms. She has been working on various multi-disciplinary projects with the Design School too. Dr Goh Wei Wei has recently won 2 gold medal awards, and 1 bronze medal award in International University Carnival on E-learning (IUCEL) 2022, 1 bronze medal award in Econdev 2022 for her experience in developing technology- rich classrooms initiatives. She introduced Engage VR platform to create an immersive presence in the virtual learning environment to her students. She also let her students have the hands-on experience of using the Oculus Quest 2 and HoloLens to experience Augmented Reality and Virtual Reality. Dr Goh Wei Wei also won a total of 4  $silver\,medals\,award\,in\,Malaysia\,Technology\,Expo\,(MTE)\,in\,year\,2021\,and\,2022\,for\,her\,innovative\,Internet$ of Things prototype development related to digital health and innovations. She also won silver medal for Smart Medication Management and Medicine Delivery System in 32nd International Invention, Innovation and Technology Exhibition in 2021. Dr Goh Wei Wei has the practical skills, the hands-on experience and the educational credentials to make a significant difference to the university.







Ts.Ir. Dr Mardeni Bin Roslee
Chief Executive Officer,
Armada Smart Tech MR Sdn Bhd
Chairman, Centre of Wireless Technology,
Centre of Excellence, Multimedia University, Malaysia

BICCRAPH

Prof. Mardeni is a Chief Executive Officer (CEO) and main founder of Armada Smart Tech MR Sdn Bhd and Chairman of Centre of Wireless Technology, Centre of Excellence, Multimedia University, Malaysia. His current research interests are 5G/6G telecommunication, Artificial Intelligence, Internet of Things and radar communication. In professional association, he was a Chairman of Institute of Electrical and Electronics (IEEE) Communication Society/Vehicular Technology Society. He is a registered Chartered Engineer with Engineering Council United Kingdom, and Member with The Institution of Engineering and Technology (IET), UK and a Senior Member IEEE (SMIEEE). He appointed as a Visiting Professor at 10 abroad Universities and at national and international level and has been involved in industry Consultation with some companies locally and internationally. He was invited as Keynote Speaker for 30 International conferences at 16 countries such as at Thailand, China, Australia, Korea, Indonesia, Singapore, Japan, French, United Kingdom, Spain, Canada, New Zealand, Romania, India and Turkey for 2009–2024. At international conferences, he hold position as General Chair of 11 conferences globally. His contributions to academic and the engineering professional over the years have earned him recognitions nationally and internationally, He is the recipient of more than 100 research awards locally and internationally including Top Research Scientist in Malaysia in 2020 from Academy of Science Malaysia.

xiv





**Dr. Anu Sayal**Faculty of Business and Law
School of Accounting and Finance,
Taylor's University, Malaysia

# BOGRAPH

Dr. Anu Sayal is currently working as Senior Lecturer in Mathematics/ Statistics with Taylor's Business School, Taylor's University, Malaysia (ranked among top 50 in Asia and 251 globally). She is a accredited trainer by HRD corp. Malaysia. She has 17+ years of teaching and research experience. She has done Bachelors in Non-medical from Guru Nanak Dev University, Amritsar. Her Post Graduation was in Mathematics from Guru Nanak Dev University, Amritsar. She has done her PhD in Mathematics from Uttarakhand Technical University Dehradun. She received the "Young Scientist Award in Mathematics: Statistics and Computer Science from Uttarakhand Council for Science and Technology, Dehradun, Uttarakhand, in February 2020 at UCOST, Dehradun. She has also received Teacher of the Year 2020 Award in September 2020 from Divya Himgiri in association with Uttarakhand Council for Science & Technology, Government of Uttarakhand, Commission for Scientific & Technical Terminology, MHRD, Govt. of India, New Delhi. She received Guruwarya samman 2021 award from Harvest educational transformational solutions (HETS). She also received Best woman scientist award from Novel research academy in December 2021. She was also awarded as the Best teacher in January 2022 by Harvest educational transformational solutions.





Ts. Dr. Norazah Mohd Suki

Professor of Marketing & E-Commerce Deputy Dean of Research, Innovation & Corporate Relations, Othman Yeop Abdullah Graduate School of Business (OYAGSB), Malaysia

BOGRAPH

Professor Ts. Dr Norazah Mohd Suki is a professor of marketing and e-commerce at the Othman Yeop Abdullah Graduate School of Business (OYAGSB), Universiti Utara Malaysia. Prof Norazah, who has been named to Stanford University's World's Top 2% Scientists list since 2019, was also named to the 'Career-long World's Top 2% Scientists' list. She is also a recipient of Malaysia's Research Star Award 2018, Highly Commended Paper in Emerald Literati Network Awards for Excellence in 2015 and 2017, winner of IGI Global Seventh Annual Awards Excellence in Research Journal, etc. Her research interests include marketing research, consumer behaviour, m-commerce, e-commerce, e- marketing, green marketing, Islamic marketing, and marketing-related fields. Prof Norazah has published more than 400 articles in journals, book chapters, books, and conference papers describing her research activities. She is also the editor of several books indexed on SCOPUS. She has extensive experience as an invited speaker in courses on Structural Equation Modelling (SEM), Statistical Package for Social Sciences (SPSS) and research methodology. Through her active participation in the co-curricular activities of Pasukan Siswa Angkatan Pertahanan Awam Malaysia, she was awarded Pingat Am Pertahanan Awam in 2017 and Pingat Bakti Pertahanan Awam in 2021.





**Dr. Jyothi AP**Faculty of Engineering and Technology
Department of CSE,M.S Ramaiah University Of
Applied Sciences, India

Dr. Jyothi A P completed her PhD in 2020, master's degree in 2009, Bbachelor's degree in 2002 from Visvesvaraya Technological University, India. She is currently working as a faculty in the Department of Computer Science and Engineering, Faculty of Engineering and Technology, M S Ramaiah University of Applied Sciences, Ramaiah Technology Campus, Bengaluru. She has nearly 18 years of experience in teaching and has published many research papers in journals indexed in SCI/SCIE, WOS, SCOPUS etc. and presented papers in several National and International conferences. Her research interest is in the field of Wireless sensor network, MANET, IOT, AI, ML and Deep Learning. She is a member of LMISTE, LMIAENG, AMIETE, IFERP, LMINSC and IEEE. She is a reviewer for SPRINGER, WILEY, IEEE, Elsevier, IGI, Oriental Journals and conferences, she is also reviewer of international conference papers from Taiwan, Prague, Czech Republic and Japan. She has authored book chapter in Springer, Wiley, IET, CRC Press Talyor and Francis group etc. She is serving as editor for reputed journals and book publications. She has served as a a resource person in India and abroad. She has received the best Women researcher award and several research excellence awards. She has Indian, Australian, German and UK Patents granted in her name.





**Dr. Hoshang Kolivand**Liverpool John Moores University
United Kingdom

# BIOGRAPHY

Hoshang Kolivand is an accomplished researcher in the field of computer science, specializing in Al and Mixed Reality. He received his MS degree in applied mathematics and computer from Amirkabir University of Technology, Iran, in 1999. He went on to pursue his PhD at the Media and Games Innovation Centre of Excellence (MaGIC-X) in Universiti Teknologi Malaysia, completing it in 2013. Dr. Kolivand further honed his expertise in Augmented Reality through a Post Doctoral program at UTM in 2014. With a rich academic background, Hoshang has previously served as a lecturer at Shahid Beheshti University, Iran, and later as a Senior Lecturer at Universiti Teknologi Malaysia. Currently, he holds the position of Reader(Associate Professor) in Al and Mixed Reality at Liverpool John Moores University and is also a Visiting Professor at Bharath Institute of Higher Education and Research: BIHER, Chennai, India. Throughout his career, Hoshang has made significant contributions to the academic community. He has authored numerous articles in international journals, conference proceedings, and technical papers, including book chapters. Additionally, he has published several books on object-oriented programming and mathematics. Dr. Kolivand is recognized as a Senior member of IEEE and actively contributes to various conferences and international journals as a Technical Program Committee  $(TCP)\,member.\,His\,dedication\,to\,advancing\,the\,field\,of\,computer\,science\,and\,his\,passion\,for\,research$ continue to drive his pursuit of knowledge and innovation.

xviii





**Ts. Ir. Dr. Mohammad Lutfi Bin Othman,** PEPC ACPE PTech CEng REEM CPMV

Universiti Putra Malaysia Selangor, Malaysia

BIOGRAPHY

Ts. Ir. Dr. Mohammad Lutfi Othman received the BSc degree with honor distinction (Magna Cum Laude) in electrical eng. from the University of Arizona, Tucson, Arizona, USA, in 1990, the MSc & DD PhD degrees in electrical power eng. from the Universiti Putra M'sia in 2004 & 2011 respectively. He is an Associate Professor at the Dept. of Electrical & Dept. of Electronics Eng., Fac. of Eng., UPM. He is a Researcher & amp; the founding member of the Centre for Advanced Power & amp; Energy Research (CAPER), UPM, now consolidated as Advanced Lightning, Power and Energy Research (ALPER). He is also an Electrical Director in a local engineering consulting firm with over 29 years of professional experience in planning, design and project administration of over 250 electrical projects. Ir. Dr. Lutfi's areas of research interest include numerical protective relay modeling/simulation/operation analysis using computational-intelligent-based data mining and expert system approaches as well as energy efficiency studies. He is a Principal Author of numerous manuscripts of high impact factor journals, a Technical Editor and Reviewer of various journal and conference manuscripts, a Technical Evaluator of research grant and a Keynote Speaker of international conferences. He is a Professional Engineer (PEng) under the Board of Engineers M'sia (BEM), an Asean Chartered Professional Engineer (ACPE), a Professional Engineering Technologist (PTech) under the Malaysian Board of Technologist (MBOT), a Chartered Engineer (CEng) under the Engineering Council UK, a Registered Electrical Energy Manager (REEM) under Energy Commission M' sia, a Certified Professional in Measurement & amp; Verification (CPMV) - Green Technology Corp M'sia, a corporate member of the Institution of Engineers M'sia (IEM), a senior member of IEEE (SMIEEE) USA, a member of the IEEE Power & Company (SMIEE Energy Society (IEEE-PES), a member of the IEEE Computational Intelligence Society (IEEE-CIS), a member of the Institution of Engineering & Dry Technology (IET) UK, a member of the International Rough Set Society (IRSS), and a member of Phi Kappa Phi Honor Society, The University of Arizona. As a Professional Engineer, he is a Mentor and Professional Interviewer for IEM/BEM PEng aspirants.







**Dr. Farman Ali**Postdoc Researcher,
Centre of Wireless Technology, Centre of Excellence,
Multimedia University, Malaysia

BIOGRAPH

Dr. Farman Ali is a Postdoc Researcher at Centre of Wireless Technology, Centre of Excellence, Multimedia University, Malaysia. His interested areas are UAV Channel Modelling, UAV to ground and UAV to ship communication and Integration of Al into optical communication and wireless Communication. Previously he was an Associate Professor at Qurtuba University of Science and IT, D.IKhan, Pakistan which focus on Digital Signal Processing, Microprocessor Microcontroller, Optical Fiber Communication, Digital and Logic Circuit Design. He has various Research projects including international grant from China National Key Research and Development Program under Grant 2018YFB0803600, in part by the Natural Science Foundation of China under and also grant from Ministry of Education and the Deanship of Scientific Research, Najran University. Kingdom of Saudi Arabia.





Dr. Ratneswary Rasiah

Associate Professor of Economics Graduate School of Business, SEGi University and Colleges, Malaysia

Dr. Ratneswary Rasiah is an Associate Professor at the Graduate School of Business ,SEGi University Malaysia , She previously held the position of Programme Director of the Post-Graduate Business (Coursework) Programmes, Taylor's Business School, Taylor's University, where she has been attached for the last eighteen years. She has extensive teaching experience in the field of Economics for the past thirty-one years, having taught numerous undergraduate and post-graduate modules. In addition, she has also taught Economics for the University of London International Programme, at the British University in Hanoi, Vietnam. She received the Taylor's Education Group Chairman's Award for Excellence in Teaching for her immense contribution in the field of teaching and learning. Dr. Ratneswary also actively undertakes research and scholarly activities. Aside from supervising PhD students and presenting papers at international conferences, she has also published several papers in peer-reviewed journals and has secured several research grants. Her research area of interest includes financial literacy, financial well-being, retirement preparedness, subjective well-being, environmental issues and fertility. Her publications involve both primary and secondary data analysis techniques including AMOS-SEM, PLS-SEM and panel estimation techniques such as Pooled Mean Group, Mean Group, Dynamic Fixed Effect and Generalized Method of Moments. She also actively conducts trainings /workshops.





**ICMDRSE** 

Dr. Norhanim binti Dewa

Senior Lecturer Graduate School of Business, SEGi University and Colleges, Malaysia

Datin Dr. Norhanim Dewa is an internationally recognized academic and industry expert with over two decades of leadership in financial education, corporate strategy, and innovation. Currently a Senior Lecturer at SEGi University's Graduate School of Business, Malaysia, she specializes in corporate finance, capital markets and business development with a strong commitment to the applied studentcentered learning. Dr. Norhanim holds a PhD in Management (Finance) and has previously served as Finance Director in both Oil & Gas and F&B sectors. Her professional journey reflects a rare integration of high-level industry acumen and deep academic scholarship. An innovator in gamified learning for financial literacy, Dr. Norhanim is the visionary behind several award-winning innovations namely; SharkFin: The VR Financial Odyssey, SmartFin Junior and SmartFin Pro. These tools blend board game mechanics, digital platforms, and immersive VR technology which earned national accolades such as Gold, Silver, and Special EduTech Innovation Awards at Malaysia's premier innovation expos. Her work has been distinguished for revolutionizing financial education among youth and advancing SDG 4 (Quality Education). An active researcher and conference speaker, she has published widely in international journals, reviewed for Scopus-indexed proceedings, and led multiple postgraduate research projects across Asia. Passionate about impact-driven education, Dr. Norhanim continues to empower communities through financial literacy, immersive learning, and academic excellence.

xxii



Python and MatLab.



Ms. K. Rajalakshmi
Assistant Professor
Artificial Intelligence and Data Science,

Kamaraj College of Engineering and Technology,

Mrs. K. Rajalakshmi is currently working as Assistant Professor, Department of Artificial Intelligence and Data Science, Kamaraj College of Engineering and Technology (Autonomous), Virudhunagar, Tamilnadu. Pursuing Ph.D in the Faculty of Information and Communication Engineering at Anna University Chennai . M.E in of Computer Science and Engineering, Sethu Institute of Technology, Virudhunagar, Tamilnadu (First Class with Distinction). B.E in of Computer Science and Engineering, SACS Mavmm Engineering College, Madurai, Tamilnadu. I have More than 5 years Teaching experience. Presented 10 Technical Papers in various International/National Conferences (4 IEEE Proceedings, 1 Springer Series). Published 3 Journals. In addition to the credit, have 3 PATENTS based on the research work. Published 1 Book/ 2 Book Chapters Active LIFE member in ISTE, IFERP, IAENG. Research Interest includes Bio-Medical

Image Processing, Deep Learning, Machine Learning, Medical Imaging, Networks, Data Science,

BIOGRAPHY





**ICMDRSE** 

# **Keynote Speaker**



Ms. N. Gajalakshmi
Assistant Professor
Artificial Intelligence and Data Science

Kamaraj College of Engineering and College, India

With over 20 years of dedicated experience in engineering education, I have consistently demonstrated a commitment to excellence in both teaching and research. I have achieved 100% results in multiple subjects, reflecting my dedication to student success and effective teaching methodologies. My academic credentials are further strengthened by numerous NPTEL certifications, enhancing my knowledge and teaching skills. In research, I have contributed to esteemed journals, filed patents, and authored copyrights, showcasing my commitment to advancing knowledge in my field. I have actively participated in and organized several Faculty Development Programs (FDPs) and workshops, fostering continuous professional growth among faculty members. As the coordinator of the AI-GNITE Innovation Club, I lead initiatives that promote innovation and the application of artificial intelligence in various domains. Additionally, I recently organized an international conference sponsored by TNSCST, facilitating knowledge exchange and collaboration among professionals in the field. Through these endeavors, I strive to contribute meaningfully to the academic community and inspire the next generation of engineers.

xxiv



# **Session Speaker**



Dr. Nitin Dhote

Professor and Head
Electrical Engineering Department,
St. Vincent Pallotti College of Engineering &
Technology, Nagpur, India

BOGRAPHY

Dr. Nitin Dhote did graduation in Electrical Engineering from VRCE (Now VNIT), Nagpur. He did postgraduation in Electrical Power System from Govt. College of Engg., Amravati, a Diploma in Business Management, and a Ph.D. in Electrical Engineering from RTM, Nagpur University. He is working as Professor & Head in the Electrical Engineering Department at St. Vincent Pallotti College of Engineering & Technology, Nagpur since July 2007. He worked as Assistant Professor in G H Raisoni College of Engineering & Management, Nagpur from 1998 to 2007. He is a member of the Board of Studies and a member of the Faculty of Science & Technology, RTM, Nagpur University. He has a total teaching experience of 27 years at UG and PG levels. His areas of interest are Renewable Energy Sources, Power System Protection, Automation, and Control. He published 48 research papers in reputed international conferences and journals. He is an approved PhD Supervisor at RTM, Nagpur University, and is guiding 5 PhD Scholars. He visited Portugal, Germany & Thailand for research paper presentations in international conferences and academic visits. He has chaired various sessions at national/international conferences. He delivered a keynote session in the International Conference ICDRISM-23 at Dubai, UAE. He is the recipient of a grant of Rs. 52 Lacs for research and training from different government funding agencies. His 2 patents are granted by the patent office, Government of India, and 1 is published in the National Journal of Patents. He has been granted 3 copyrights by the Government of India. He is a reviewer of IEEE, IET, Taylor & Francis, KIEE & other reputed international journals. He is a member of professional bodies ISTE & IEEE.



# **Session Speaker**

**ICMDRSE** 



**Dr. Diana Teresa Parra-Sanchez**Scientific Director
Centro de Innovación y Productividad InnovaCTIon
Colombia

Diana Teresa Parra-Sanchez is a researcher in Information Technology with a Ph.D. in Engineering. She specializes in the adoption of digital technologies, digital transformation in small and medium-sized enterprises (SMEs), and innovation policies. She is currently the Scientific Director of InnovaCTIon and is undertaking a postdoctoral fellowship at the Universidad Autónoma de Bucaramanga, Colombia, where she explores the impact of artificial intelligence and augmented reality on nature-based tourism. With extensive experience in the formulation and management of science, technology, and innovation projects, she has led initiatives aimed at fostering digital adoption and technological innovation. She is also an editor and reviewer for high-impact scientific journals, with her research published in international journals covering digitalization, IoT adoption, and knowledge management.

xxvi



# **Session Speaker**



Dr. Nalin Abeysekera

Dean
Faculty of Management Studies,
The Open University of Sri Lanka
Sri Lanka

 $Professor\,Nalin\,Abeysekera\,is\,a\,distinguished\,academic\,and researcher, currently\,serving\,as\,the\,Dean\,of\,Abeysekera\,is\,a\,distinguished\,academic\,and\,researcher, currently\,serving\,as\,the\,Dean\,of\,Abeysekera\,is\,a\,distinguished\,academic\,and\,researcher, currently\,serving\,as\,the\,Dean\,of\,Abeysekera\,is\,a\,distinguished\,academic\,and\,researcher, currently\,serving\,as\,the\,Dean\,of\,Abeysekera\,is\,a\,distinguished\,academic\,and\,researcher, currently\,serving\,as\,the\,Dean\,of\,Abeysekera\,is\,a\,distinguished\,academic\,and\,researcher, currently\,serving\,as\,the\,Dean\,of\,Abeysekera\,is\,a\,distinguished\,academic\,and\,researcher, currently\,serving\,as\,the\,Dean\,of\,Abeysekera\,is\,a\,distinguished\,academic\,and\,researcher, currently\,serving\,as\,the\,Dean\,of\,Abeysekera\,is\,a\,distinguished\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,and\,academic\,a$ the Faculty of Management Studies at the Open University of Sri Lanka. With a Ph.D. in Management and a B.Sc. in Marketing, he has over two decades of experience in academia and consultancy, specializing in Strategic Management, Marketing, and Research Methodology. Professor Abeysekera has taught and conducted research internationally, including in Canada, Dubai, Singapore, Oman, India, and Qatar, and has supervised numerous Ph.D. students. In addition to his academic work, Professor Abeysekera has made significant contributions to national development through his consulting roles and policy advisory positions. He has worked with leading organizations and government bodies, shaping industry practices and national policies. His expertise has been instrumental in projects related to health financing, tourism, and economic resilience, demonstrating his commitment to driving impactful change at both the organizational and national levels. He is the Editor-in-Chief of the Sri Lanka Journal of Management Studies and a reviewer for several leading international journals. His research has resulted in numerous publications, including journal articles, conference papers, and books. Recognized for his contributions, Professor Abeysekera has received awards such as the "Outstanding Asian Educator" and the Best Reviewer Award. Passionate about knowledge dissemination and nurturing future leaders, he emphasizes the importance of ethical practices, emotional intelligence, and empathy in leadership.





# **Panel Discussion Speakers**



**Dr. Chok Nyen Vui**Manipal GlobalNxt University,
Malaysia



**Dr. Rana Altounjy**Manipal GlobalNxt University,
Malaysia



**Dr. Dalwinder Kaur**Manipal GlobalNxt University,
Malaysia



Dr. Chit Su Mon

Assistant Professor &
Programme Director,
School of Mathematical & Computer
Sciences, Heriot-Watt University,
Malaysia



Ms. Tan Lay Hong
Senior Lecturer,
Department of Technology
Management, Universiti Teknikal
Malaysia Melaka, Malaysia

Discussion on "Tech-Driven Sustainability: Pioneering Solutions Across Education, Nutrition and Environment"







**Dr. Cheok Mui Yee**Manipal GlobalNxt University,
Malaysia



**Dr. Jayanthy Periannan** Manipal GlobalNxt University, Malaysia



**Dr. Sameer Sawant**Manipal GlobalNxt University,
Malaysia



**Dr. Sukumaran C**Director of Physical Education
Government Law College,
Madurai, Tamil Nadu, India



**Dr. Fouzia Ajmal**Assistant professor IIUI, Pakistan



Dr. Kamalesh Ravesangar
Programme Leader & Assistant
Professor, Tunku Abdul Rahman
University of Management and
Technology, Malaysia





Ms. Tan Lay Hong
Senior Lecturer,
Department of Technology
Management, Universiti Teknikal
Malaysia Melaka, Malaysia



Mr. Patrick Duffy Bayuong
Teacher
Belaga District Education
Office, Ministry of Education
Malaysia, Belaga, Sarawak, Malaysia



Umer
Assosa University Benishangul
Gumuz region, Assosa,
Ethiopia

Dr. Mohammed Ibrahim



Ms. Sujatha Balakrishnan Senior lecturer, Department of Management, Nilai University Malaysia



Lecturer, School of Business and Social Sciences, Albukhary International University, Malaysia

Ms. Aliaa Diyana Zamri



**Dr. Ayu Haslija Abu Bakar** Assistant Professor, Faculty of Engineering, Sunway University, Malaysia





Dr. Norhasyimi Rahmat

Senior Lecturer, School of Chemical Engineering, Universiti Teknologi MARA, Malaysia



Ts. Dr. Ngu War Hlaing

Lecturer at School of Engineering, Faculty of Engineering and Technology, Sunway University Malaysia



Dr. Madhurimadasgupta

HOD, Department of Gender Studies, Ashadi Wisdom Campus, Sri Lanka & Post-Doctoral Fellow, Abo-Akademi University, Finland



Dr. Tan Fee Yean,

Associate Professor, Universiti Utara Malaysia, Malaysia



Dr. Goh Wei Wei,

Associate Professor, School of Computer Science, Taylor's University, Malaysia.



Dr. Everly A. Nacalaban

BSBA Program Chair Bukidnon State University, Malitbog Campus Malitbog, Bukidnon, Philippines





**Mr. Phua Yeong Tsann**Taylor's University,
Malaysia



Dr. R.Aghila

Professor
Artificial Intelligence and Data
Science, Kamaraj College of
Engineering and College, india



Ms. N. Gajalakshmi
Assistant Professor
Artificial Intelligence and Data
Science, Kamaraj College of
Engineering and College, india



Ms. K.Rajalakshmi
Assistant Professor
Artificial Intelligence and Data
Science, Kamaraj College of
Engineering and College, india





# **Exclusive Workshop Speaker**



Workshop Title: "Breaking Into High-Impact Journals: A Roadmap for Emerging Scholars to Publish in Reputed Journals"

### Dr. Srikumar Chakravarthi

Deputy Vice Chancellor (Academic, Research and Innovation) SEGi University & Colleges, Malaysia.

# **Workshop Speaker**



Dr. Lee Fong Yee

Assistant Professor
Faculty of Computing and Informatics,
Multimedia University, Malaysia





# **Debate Speakers**



**Dr. Norbayah Mohd Suki** Universiti Utara Malaysia

Malaysia.



Ts. Dr. Norazah Mohd Suki

Professor of Marketing & E-Commerce, Deputy Dean of Research, Innovation & Corporate Relations, Othman Yeop Abdullah Graduate School of Business (OYAGSB), Malaysia



Dr. Aliyah Nur Zafirah Sanusi

Assistant Professor Kulliyyah of Architecture And Environmental Design,International Islamic University Malaysia, Malaysia



Dr. Ilham Sentosa

Associate Professor Universiti Kuala Lumpur (UniKL), Malaysia



Dr. Jasmine Anak Jain

Senior Lecturer School of Education, Faculty of Social Sciences & Leisure Management, Taylore University, Malaysia Title:
Research for
Impact or
Research for
Publication:
What Should
Be the Priority





# **Organizing Committee**

### **Conference Chair**

### Dr. Goh Wei Wei

Associate Professor, School of Computer Science, Taylor's University, Selangor, Malaysia

### Ts. Ir. Dr. Mardeni Bin Roslee

Professor/Chairman, Multimedia University, Cyberjaya, Malaysia

### Conference Co-Chair

### Dr. Khairil Bin Anuar

Lecturer, Multimedia University, Cyberjaya, Malaysia

### **Organising Secretary**

### Dr. Ummi Naiemah Saraih

Associate Professor, Faculty of Business & Communication, Universiti Malaysia Perlis, Perlis, Malaysia

### **Scientific Committee**

### Dr. Raju Bhai Manandhar

Deputy Director BBA Program, Department of Marketing, Tribhuwan University, Public Youth College, Kathmandu, Nepal

### Dr. Anshad A S

Principal, John Cox Memorial CSI Institute of Technology, Kerala, India

### Dr. Azli Yahya

Associate Professor, Department of Electrical and Computer Engineering, UTM Johor Bahru, Johor, Malaysia

### Dr. Tan Fee Yean

Associate Professor, School of Business Management, Universiti Utara Malaysia, Kedah, Malaysia

### Dr. Abdul Manaf Bohari

Associate Professor, School of Business Management, Universiti Utara Malaysia, Kedah, Malaysia

### Maricris Usita

Campus Director, Department of Information Technology, Occidental Mindoro State College, Occidental Mindoro, Philippines

### Dr. Mamata Bhandar

Dean, Manipal GlobalNxt University, Kuala Lumpur, Malaysia

### Dr. Noorlindawaty Md Jizat

Senior Lecturer, Multimedia University, Cyberjaya, Malavsia

### Dr. Chinnaiyan Senthilpari

Associate Professor, Multimedia University, Cyberjaya, Malaysia

### Dr. Teh Chin hui

Assistant Professor, Multimedia University, Cyberjaya, Malaysia

### Murad Hani Abdel Rahman Halabouni

Postgraduate, Multimedia University, Cyberjaya, Malaysia

### Fardin Kabir

Postgraduate, Multimedia University, Cyberjaya, Malaysia Review Committee Member

### Khairayu Badron

Associate Professor, Faculty of Engineering, International Islamic University Malaysia, Selangor, Malaysia

### Dr. M. Kumar

Associate Professor, Department of Mechanical Engineering, KPR Institute of Engineering & Technology, Tamil Nadu, India

### Lim Chia Yean

Senior Lecturer, School of Computer Sciences, Universiti Sains Malaysia, Pulau Pinang, Malaysia

### Dr. Devarajan Ramasamy C.

Associate Professor, Department of Mechanical Engineering, Universiti Malaysia Pahang, Pahang, Malaysia

### Dr. Fazilah Razali

Senior Lecturer, Curriculum and Instruction, Universiti Putra Malaysia, Selangor, Malaysia

### Aliaa Diyana Zamri

Lecturer, Centre for Foundation and General Studies, Albukhary International University, Kedah, Malaysia

### Dr. Aidanazima Abashah

 $Senior\,Lecturer,\,Business\,Department,\,Universiti\,Malaysia\,Perlis\,(UniMAP).,\,Perlis,\,Malaysia$ 

### Dr. Rana Altounjy

Assistant Professor, Department of Accounting & Finance, Manipal GlobalNxt University, Kuala Lumpur, Malaysia

### Dr. Kamalesh Ravesangar

Assistant Professor, Human Resource Development, Tunku Abdul Ramahan University, Penang, Malaysia

### Dr. Nurshahira Ibrahim

Senior Lecturer, Academy of Islamic Contemporary Studies, Universiti Teknologi Mara, Selangor, Malaysia





### Dr. Mohd Rosdzimin Abdul Rahman

Associate Professor, Department of Mechanical Engineering, Universiti Pertahanan Nasional Malaysia, Kuala Lumpur, Malaysia

### Dr. Suhana Binti Koting

Senior Lecturer, Department of Civil Engineering, University of Malaya, Kuala Lumpur, Malaysia

### Mathivannan Jaganathan

Senior Lecturer, Entrepreneurship, Universiti Utara Malaysia, Kedah, Malaysia

### AP Dr. Ahmad Albattat

Associate Professor, School of Global Hospitality and Tourism, Asia Pacific University of Technology and Innovation, Kuala Lumpur, Malaysia

### Dr. Md. Hasanuzzaman

Associate Professor, Faculty of Engineering Technology, Universiti Malaya Power Energy Dedicated Advanced Centre, Kuala Lumpur, Malaysia

### Dr. Mohd Izhar A. Bakar

Associate Professor, Department of Electrical & Electronics Engineering, Universiti Kuala Lumpur British Malaysian Institute, Selangor, Malaysia

### Dr. Cheok Mui Yee

Part time lecturer, Manipal GlobalNxt University, Kuala Lumpur, Malaysia

### **International Advisory Committee**

### Dr. Sukumaran

Director, Faculty of Physical Education, Government Law College, Tamil Nadu, India

### Mohammed Ibrahim Umer

Lecturer, Department of Economics, Assosa University, Assosa, Ethiopia

### Dr. Fouzia Ajmal

Assistant Professor, Department of Teacher Education, International Islamic University Islamabad (IIUI), Islamabad, Pakistan

### Led Karen R. Zamudio

Faculty Member, College of Community Health and Allied Medical Sciences, Don Mariano Marcos Memorial State University, Bacnotan, Philippines

### Dr. Basel Shahin

Adjunct Lecturer, Manipal GlobalNxt University, Kuala Lumpur, Malaysia

### Dr. Chidananda Murthy M V

Associate Professor, Department of Electronics and Communication Engineering, Sri Siddhartha Institute of Technology, Karnataka, India

### **National Advisory Committee**

### Dr. Prem Adheesh Lekhi

Healthcare Professional, INGO, SSIOM INGO, Petaling Jaya, Malaysia

### Dr. Teoh Kok Ban

Senior Lecturer, Applied Statistics, Management, Organizational Behavior and Psychology Counseling, ViTrox College, Pulau Pinang, Malaysia

### Dr. Ng Yin Hoe

Senior Lecturer, Faculty of Engineering, Multimedia University, Selangor, Malaysia

### Sujatha Balakrishna

Senior Lecturer, Faculty of Management, Nilai University, Seremban, Malaysia

### Ts. Dr. Irny Suzila Ishak

Assistant Professor, Faculty of Communication, Universiti Teknologi Malaysia, Johor Darul Ta'zim, Malaysia

### Mannur Ismail Shaik

Senior Lecturer, Faculty of Fisheries and Food Science, Universiti Malaysia Terengganu, Terengganu, Malaysia

### Dr. Dalwinder Kaur Dhillon

Senior Lecturer, School of Education, Manipal GlobalNxt University, Kuala Lumpur, Malaysia

### Muhamad Razuhanafi Bin Mat Yazid

Senior Lecturer, Department of Civil Engineering, Universiti Kebangsaan Malaysia, Selangor, Malaysia

### Nur Azaliah Abu Bakar

Senior Lecturer, Faculty of Artificial Intelligence, Universiti Teknologi Malaysia, Johor Darul Ta'zim, Malaysia

### Na Wei Chier

Senior Lecturer, School of Management, Universiti Sains Malaysia, Pulau Pinang, Malaysia

### Patrick Duffy Bayuong

Senior Consultant Neurosurgeon, General Service Sarawak, Sarawak State Education Department, Sarawak, Malaysia

### Dr. Jayanthy Periannan

Adjunct Lecturer, Manipal GlobalNxt University, Kuala Lumpur, Malaysia

### Dr. Sameer Sawant

 $\label{thm:continuity} Adjunct\,Lecturer,\,Manipal\,GlobalNxt\,University,\,Kuala\,Lumpur,\,Malaysia$ 

### Dr. V. Ramani Bai

Assistant Professor, Faculty of Engineering, UCSI University, Kuala Lumpur, Malaysia

### Ayu Haslija Abu Bakar

Assistant Professor, Faculty of Enginering, Sunway University, Selangor, Malaysia





### **Abstract's Index**

> Nur	Student Insights: The Role of Quillbot in Academic Writing
> Dino	elligence in Critical Reading Learning: A Systematic Literature Review of Junior Secondary Students da Amelia man Suryaman
	ation of the Understanding by Design (UbD) Framework in Writing Learning Modules h Marie Tumlos-Castillo
to the SDGs  Muh  Tian  Sug	and Education for Sustainable Development in the Digital Age: A Bibliometric Analysis of Contributions s
(2006–202 • Tiar	the Role of Education for Sustainable Development (ESD) in Social, Science, and Environmental Education 25): Bibliometric Perspective
→ Diya	entation of the 'Emergency Warning' Movement in the Indonesian Media: Narasi TV and TV One News 0 ah Herawati ana Widyastuti i Artanti
<ul><li>Der</li><li>Mirj</li></ul>	Writing Skills: Integrating News in Levels and Instagram
Managerial	ing Role of Organizational Collaborative Culture in the Relationship between Leadership Qualities and Effectiveness
Using Rascl  > Sup  > And  > Ach	the Cognitive Domain of Climate Literacy in Science Teacher Pre-Service and Possible Improvements h Analysis
<ul> <li>Suh</li> <li>Ari \</li> <li>Rini</li> <li>Riar</li> </ul>	nunity Development for Teachers and Students Through the 40-Day Challenge Program





ine influence of Santi Artificial intelligence Chatbots on Ennancing Student Creativity	
› Erna Widyasari	
<ul> <li>Budi Murtiyasa</li> </ul>	
› Eko Supriyanto	
Transformation of Science Laboratory Learning from Conventional to Project-Oriented Laboratory: A Systematic	
Literature Review	12
> Febrian Andi Hidayat	
› Ida Kaniawati	
> Andi Suhandi	
> Hernani	
> Lisa Dewi Ramadany	
From Rhetoric to Reality: Investigating the Inclusiveness of Persons with Disabilities in Local Government of	
Bangladesh	17
> Rowshon Ara Romke	10
Women as Drivers of Philippine Rural Development: Analyzing the Role of Women Employment in Shaping Regional	1.4
Poverty Dynamics and Human Development Using Seemingly Unrelated Regression	14
> Celso Gutierrez Tan Jr.	
> Array	
Dimensions of Investment Gullibility: Exploring the Ponzi Scheme Victims in Davao City	15
William T Sucuahi	
› Array	
Thriving in the Digital Era: Technology Adoption, Competencies, and Culture on Higher Education Personnel	
Performance	16
Marlie Joy G. Sigod	
Profiling Gender-Based Disparities in Scientific Literacy Among STEM Students in the Division of Eastern Samar:	
Insights for Targeted Educational Interventions	17
> Roneil A. Campanero	
> Rica C. Elacion	
Novel Use of Deep Learning for Adaptive Weighted Loss in the Segmentation of X-ray Images for Detecting Wrist	
Fractures	18
> Teuku Radillah	
> Sarjon Defit	
Gunadi Widi Nurcahyo	
Novel Use of Deep Learning for Adaptive Weighted Loss in the Segmentation of X-ray Images for Detecting Wrist	
Fractures	19
> Muhammad Dahria	
> Sarjon Defit	
› Yuhandri	
Enhanced Hydrophobicity of Sweet Potato Starch Bioplastic Reinforced with Activated Carbon	20
Josef Vill S. Villanueva	20
> Virgilio Y. Abellana	
	01
Effect of Activated Carbon on the Mechanical Properties of Sweet Potato Starch Bioplastic	21
> Josef Vill S. Villanueva	
> Virgilio Y. Abellana	
Economic Contributions and Employment Effects of Sari-Sari Stores in Dumaguete City	22
› Ildefe T. Villanueva	





An inquiry to the institutionalization of Esports as an Academic Program through the Lens of Edmund Burke s	
Enlightened Conservatism  Dan Ryan P. Arlalejo  Daryl Sorronda Jr.	23
<ul><li>Mona L. Laya</li><li>Julie Ar E. Sibala</li></ul>	
Exploring the Dark Side of AI in Design Education: Teachers' Perceptions and Concerns	24
Development and Acceptability of the E-nurse Patient Safety System Towards Technology Management  > Peter Arnold T. Tubayan	25
Navigating Inclusion: Unveiling The Lived Experiences of Parents with Children of Special Needs in Mainstream Classes	
<ul> <li>Kyla May A. Calipayan</li> <li>Meralyn N. Delos Santos</li> <li>Vinci Joy Flores</li> <li>Christopher C. Baldonado</li> <li>Porferia S. Poralan</li> </ul>	
Innovative Approaches in Teaching Reading: The Flipped Classroom Model for EFL Students	27
Understanding Disruptive Innovation: A Meta-analysis of the Existing Literature and Its Ubiquity in Frontier Ecor Md Azzajur Rahman	10my28
Impact of Reflection on Developing Transferable Skills: A Qualitative Study	29
The Role of Data Privacy in Digital Marketing: The Reality Check of Consumer Perspective  Md. Aminul Islam	30
A Comparative Analysis of Stock Return for Amazon and Alibaba Based on Time Series Model and Control Char  Ruoyi Wang  Mei Tuan Teng  Chia Yean Lim	t3
An Enhanced Usability Evaluation Framework for Malaysia Higher Education Institution's Learning Managemen Systems  Chin Keong Eric Loo	
<ul> <li>Chia Yean Lim</li> <li>Nor Athiyah Abdullah</li> </ul>	
Kindergarten Teacher Cognition and the Stress Paradox: Global Insights from a Two-Decade Bibliometric Exploration  Hansen Zhou  Wei Tian  Hairul Nizam Ismail	33
Spatial Writing as a Critical Perspective in Contemporary Literary Studies: A Case Study of Shih Shuching's Nov Huang Xin	/els34
Democratizing or Non-Democratizing India: Intra Party Experiences in Indian States	35
Unveiling Emotion Patterns Using Electrodermal Activity Amplitudes for Lightweight Emotion Recognition Mod > Betsy Chacko > Dr. Anil George K.	dels36



Relationship between the Work Stress Levels of Remote Employees and Their Bosses' Leadership in a Service Company in Colombia	37
<ul> <li>Cristian Camilo Osorio Ordoñez</li> <li>Adrian Marcel Garcia Caicedo</li> </ul>	07
Bilingualism, Auditory Stimulation, and Attention Swings in University Students  Yarlequé Chocas, Luis Alberto  Javier Alva, Leda  Nuñez LLacuachaqui, Edith Rocío  Gomez Chamorro, Elizabeth Angelina  Paola Julia Parra Ocampo	38
Perception of Learning ESL in Students of Mining Engineering Professional Schools in Peru	39
Trade Openness, Tariffs, and Economic Growth: An Empirical Study from Countries of E-7	40
Qualitative Research in the World, A Bibliometric Study from Scopus	42
Enhancing Personal Safety: The Need for Context-Aware, Automated Threat Detection Systems	43
A Review on 2H-benzo[b] [1,4] oxazin-3(4H)-one Novel Derivatives  Palla. Sai Lakshmi Puligilla. Shankaraiah*	44
Petroleum Quality Prediction and its Optimization: Development of Optimized Fuzzy Control Charts for Enhancing the Petroleum Quality  Vipin Kumar	45
Investigating the Influence of Liquidity Risk on Bank's Financial Performance: Empirical Evidence from the Philippines  Joy C. Lawenko	346
Understanding the Principles of Digital Photography in Syariah Investigations: A Systematic Literature Review	47
From Concept to Market: Perceptions, Market Potential, and Branding Elements of an Alugbati ( <i>Basella alba</i> ) and Cocoa ( <i>Theobroma cacao</i> )-based Chewing Candy for Athletic Performance	48
<ul> <li>Kotak Nusantara: A Montessori-Based Play Medium for Introducing Cultural Literacy to Children Aged 5-6 Years</li> <li>Rina Jayani, Sri Wulan</li> <li>Nurbiana Dhieni</li> </ul>	49
Development And Acceptability of Instructional Materials in Methods of Research for Entrepreneurship using Computer-Assisted Instruction	50
Competence of Day Care Workers: Basis for Higher Education Institution's Extension Project Development	51
The Future of Learning: A Literature Review on the Effectiveness of Montessori and Project-Based Learning	52



An Analysis of the Impact of Knowledge Management on Internal Marketing in Healthcare: A Case Study of a UAE Hospital	53
Malini Nair	
Profile of Socio-Emotional Issues of Gifted and Talented Students: A Counselling Approach Strategy  Tengku Elmi Azlina Tengku Muda	54
Employment Outcomes and Curriculum Alignment in Computer Studies at a State University A Tracer Study Employing the MIMI Interview Method	55
Precarity and Protection: Addressing Working Conditions on Digital Labor Platforms in Malaysia	56
Print2Type: Revolutionizing Blood Group Detection Through Fingerprint Analysis and ML  Manish Goswami  Bhuvan Patil  Aniket Mishra  Prantik Deodhagale  Dhanshri Supratkar  Vishakha Padole	57
Moderating role of Entrepreneurial Intention on the relationship between Entrepreneurial Education and People  Management Skills	58
The Role of Al in Workforce Transformation: Implication for HR Adoptability and Ethical Consideration	59
Digital Transformation of Indonesian Government Procurement: Identifying Success Factors and Challenges	60
From Game to Gains - Ai Driven Language Process  Dr. Balamurugan A  Kiran P  Jeevitha U  Nandhini K	61
Mortality Risk Prediction Of Infants At Birth using Fetal Data.  Hema Sri Naga Sita Kakumanu Laxmi Prathyusha Nelluru Kavya Ketha Brahma Naidu Nalluri	62
Innovative Infrastructure Inspection System: Development and Pilot Deployment in Baguio City	63
Opinion Mining from Traveler Comment using Natural Language Processing Machine Learning Techniques	64
Design of a Web Based Academic Counselling Information System in University: A Case Study of Jakarta State University, Indonesia	65



Enviro	onmental, Social, and Governance Risk Research Trend in Scholarly Publications: A Bibliometric Perspective Josephine Wuri Laurentius Bambang Harnoto Media Putri Baroto	.66
	ring Teaching Practices in 5G XR-based Distance Co-learning: A Case Study on Instructional Implementation in nese Elementary Schools	. 67
	ors Affecting Parents' Decisions on Treatments and the Perceived Impact on Children with Autism Spectrum der (ASD)	.68
Open  , , , , , ,	AlPerovskite: A Visualization Dashboard of Solar Performance Trends of 2D Lead-Halide Perovskite	. 69
	volution of Yiwu's Small Commodity Market: Cultural Entrepreneurship, Digitalization, and Internationalization rd Southeast Asia	.70
Unveil	ling Employee Perspectives on Returning to The Workplace: A Study on The IT Industry	71
Asses	ssing The Phillips Curve in China: An Empirical Study of Inflation and Unemployment	.72

xlii



### Unlocking Student Insights: The Role of Quillbot in Academic Writing

### Nur Hidayati

Yogyakarta State University, Indonesia

### Sari Hidayati

Yogyakarta State University, Indonesia

#### Abstract:

Al tools have become widely used in the educational field, providing students with innovative approaches to improve their academic performance. This study examined the perceptions of post-graduate students majoring in English Education regarding the use of Quillbot in academic writing. The study employed a qualitative methodology within an interpretive paradigm. A total of 6 students participated in semi-structured interviews to gather in-depth insights into their experiences. The results showed that students frequently used Quillbot due to its efficiency and ability to paraphrase texts effectively. However, some students expressed concerns regarding the accuracy of Quillbot in preserving the original meaning and noting that some of the insights generated were not entirely suitable for academic writing. Furthermore, while some students believed that Quillbot contributed positively to their vocabulary mastery and comprehension of the material, others considered that using Quillbot reduced their active engagement and comprehensive understanding of the content. This duality of perception highlights the need for critical evaluation of Al tools in academic writing context. Ultimately, this research provides important insights into the role of Al tools, such as Quillbot, in academic writing practices, suggesting while it offers significant benefits, it also presents challenges that must be addressed to enhance writing outcomes effectively.

Keywords: Roles, Quillbot, Academic Writing, Post-Graduate Students



### Artificial Intelligence in Critical Reading Learning: A Systematic Literature Review of Junior Secondary Students

#### Dinda Amelia

Language and Literature Education, Yogyakarta State University, Indonesia

### Maman Suryaman

Language and Literature Education, Yogyakarta State University, Indonesia

### Abstract:

This study aims to systematically review the application of Artificial Intelligence in improving critical reading skills among junior high school students. The rapid development of AI technologies has transformed educational practices, particularly in reading comprehension and analysis. By analyzing peer-reviewed articles from 2015 to 2023, this review highlights how AI tools such as intelligent tutoring systems, natural language processing, and adaptive learning platforms have been used to improve students' critical reading skills. To achieve the purpose of this article, a Systematic Literature Review (SLR) was conducted to find research conducted in undergraduate and graduate programs investigating the subject of AI applied to critical reading learning. The final analysis used a total of 20 studies consisting of journals.

The main results show that most of the research on Al in critical reading learning for junior high school students is conducted in the fields of computer science, engineering, and language. The findings suggest that Al-based approaches offer personalized learning experiences, immediate feedback, and interactive engagement, which significantly contribute to students' critical thinking and text analysis skills. However, there are still challenges in integrating Al effectively, such as limited access to technology, teacher training, and potential over-reliance on automated feedback. The review concludes by discussing implications for educators and policy makers, as well as providing suggestions for future research and practice in Al-driven critical reading instruction.

Keywords: Artificial Intelligence, Critical Reading, Junior High School Students, Systematic Literature Review, Educational Technology



# A Re-Evaluation of the Understanding by Design (UbD) Framework in Writing Learning Modules

### Leah Marie Tumlos-Castillo

De La Salle Santiago Zobel, Muntinlupa, Philippines

### Abstract:

The heart of curriculum design is to give opportunities and provide support to students so they can achieve understanding and transfer of learning. This is made possible when teachers produce well-written learning modules. Back in 2015, an initial evaluation of the Understanding by Design (UbD) framework in writing learning modules was conducted. Results show that high school teachers of De La Salle Santiago Zobel (DLSZ) appreciate the concise and practical guidance of  $backward\ design\ in\ curriculum\ planning.\ In\ this\ reevaluation\ study, the\ question\ I\ desire\ to\ find\ answers\ to\ is:\ How\ is\ the\ UbD$ framework extensively used by Junior High School (JHS) teachers in writing learning modules? Primary research data were obtained by conducting an online survey using Google Forms among all JHS teachers and administrators (N=92) across 12 subject areas. There were 12 items in the survey questionnaire. Eleven (11) items pertained to the three (3) stages of the UbD framework, while one (1) item was concerned with how helpful the design framework is in systematically preparing the learning modules. Furthermore, an open-ended question was asked on the suggestions of teachers in making the learning modules more relevant and useful to them as users, and more effective in obtaining our instructional goals. Three (3) focus group discussions using Google Jamboard were held with nine (9) JHS educators to validate their perceptions in the use of the said framework. In addition, document analysis of 12 learning modules (6 core learning areas and 6 special subjects) was conducted to determine how evident the UbD framework is used by teachers based on its three (3) stages. This study employed a mixed-method approach where quantitative data were analyzed using descriptive statistics, while descriptive data were analyzed using thematic analysis. Results of this study indicate that DLSZ JHS teachers and administrators perceive the UbD framework to be both relevant and useful in writing learning modules based on its principles that they find highly evident. The results also affirm that the said design framework helped enhance the delivery of instruction through purposeful curricular planning. While teaching for the purpose of understanding entails an intricate process, the UbD framework has successfully guided the teachers to undergo thoughtful planning, thereby helping them attain the desired learning goals of each lesson.

Keywords: Understanding By Design, Backward Design, Curriculum Design, Learning Module



# E-Learning and Education for Sustainable Development in the Digital Age: A Bibliometric Analysis of Contributions to the SDGs

### Muhammad Anarda Wiguna

Department of Curriculum and Educational Technology, Faculty of Education and Psychology, Yogyakarta State University, Indonesia

### Tiara Swastika Putri

Department of Chemistry Education, Faculty of Mathematics and Science, Yogyakarta State University, Indonesia

### Sugeng Bayu Wahyono

Department of Curriculum and Educational Technology, Faculty of Education and Psychology, Yogyakarta State University, Indonesia

### Dwi Rizki Mutiarasani

Department of Chemistry Education, Faculty of Mathematics and Science, Yogyakarta State University, Indonesia

### Abstract:

The implementation of the Sustainable Development Goals (SDGs) by the United Nations in 2015 positioned education as a key element in achieving these global objectives, particularly SDG 4, which focuses on quality education. This study explores the role of e-learning in supporting Education for Sustainable Development (ESD) and its alignment with the Sustainable Development Goals (SDGs). Using a bibliometric analysis of 421 publications from 2010 to 2023 sourced from the Scopus database, the research identifies publication trends, international collaboration, and thematic developments in e-learning related to SDGs. The findings indicate significant growth in e-learning research following the adoption of the SDGs in 2015, with the most substantial increase occurring post-COVID-19 due to accelerated digital education needs. China, Spain, and the United States are highlighted as leading contributors to this field. Key topics identified include the integration of sustainability principles in digital education and the use of emerging technologies such as artificial intelligence (AI) and augmented reality (AR). These insights emphasize the potential of e-learning as a vehicle for advancing SDG 4 (Quality Education) and contributing to other goals like SDG 13 (Climate Action). The analysis also underscores challenges, such as digital inequalities, that must be addressed to enhance the reach and impact of e-learning in sustainable education.

Keywords: e-learning, Online Learning, Education For Sustainable Development, ESD, Sustainable Development Goals, SDGs, Bibliometric Analysis, Digital Learning, Technology-Enhanced Learning



### Analysis of the Role of Education for Sustainable Development (ESD) in Social, Science, and Environmental Education (2006–2025): Bibliometric Perspective

### Tiara Swastika Putri

Department of Chemistry Education, Faculty of Mathematics and Science, Yogyakarta State University, Indonesia Muhammad Anarda Wiguna

Department of Chemistry Education, Faculty of Mathematics and Science, Yogyakarta State University, Indonesia

### Abstract:

The purpose of this study is to determine the trend of education for sustainable development in social science, environmental, mathematics, and chemistry education from a literature review and bibliometric analysis. This paper is also equipped with an explanation of the definition of education for sustainable development (ESD). VOSviewer mapping is used to analyze bibliometric data. The Scopus site is used to obtain research data. The keywords "education for sustainable development", "sustainable development", and "education" are used by us as keyword data searches for this study. We searched for data from 2006 to 2025. The results of the study showed that research on ESD in education was found from 2006 to 2025. In addition, the results of the study also showed that from 2006 to 2013 research increased, but in 2014 it decreased and increased in 2020 and decreased again in 2021. The highest peak of research was in 2022 with 167 articles. This study shows how important bibliometric analysis is to obtain information about the phenomenon. This study is prospective in helping and being a reference for scientists and researchers in conducting and determining research topics, especially regarding ESD.



### The Representation of the 'Emergency Warning' Movement in the Indonesian Media: Narasi TV and TV One News

### Diyah Herawati

Yogyakarta State University, Indonesia

### Susana Widyastuti

Yogyakarta State University, Indonesia

### Yeni Artanti

Yogyakarta State University, Indonesia

### Abstract:

This study examines how Narasi TV and TV One News represented the Emergency Warning movement in Indonesia. It combines Fairclough's (1995) three-dimensional framework and Van Dijk's ideological square to compare mass media depictions at the textual and discursive levels. The sample consisted of four articles from Narasi TV and three from TV One News. To analyze the news articles, the researchers applied Van Dijk's Ideological Square (1998) combined with Fairclough's Three-Dimensional Model (1989, 1995).

The results revealed that both media outlets recognized the Emergency Warning movement as "the ingroup" and the regime's figures as "the outgroup." This can be seen in the absence of any negative predications or reported speech that describes the movement as rebels or illegals. However, while Narasi TV delivered the Emergency Warning as a call for public movement and a critical reflection on the state of Indonesian democracy, TV One News adopted a more neutral approach, focusing on the social media virality of the movement and reactions from public figures without explicitly endorsing or opposing it. These contrasts highlight how media can shape public perception and civic engagement. This study contributes to the understanding that mass media has its own ideology in presenting news and how this ideological view can influence readers to act and participate in the movement. The researcher suggests broadening this study by examining diverse media outlets and audience responses to democratic movements, offering insights into the media's role in shaping civic engagement across cultural contexts.

Keywords: Critical Discourse Analysis, Emergency Warning Movement, Mass Media, Ideology, Language



### Improving Writing Skills: Integrating News in Levels and Instagram

### Deni Yatri

Universitas Negeri Malang, Indonesia

### Mirjam Anugerahwati

Universitas Negeri Malang, Indonesia

### Lestari Setyowati

Universitas Negeri Malang, Indonesia

### Abstract:

In the 21st century, Instagram has emerged as one of the latest and most popular Social Networking Sites (SNS) that can be integrated with 'News in Levels' App to improve the writing skills of EFL learners. This research employs a literature review methodology to critically examine the collaboration between these two apps in the context of generating writing content through Instagram. The process involves utilizing vocabulary from the 'News in Levels' app, yielding two primary outcomes: 1) Retelling the News, and 2) Creating original content. This article assesses the efficacy of this collaborative approach, delving into how it can be effectively incorporated into the learning process. It emphasizes the advantages of such integration, identifies necessary tools, proposes alternative methods to engage students in writing activities, and outlines essential factors to consider during the implementation phase. The empirical findings of this research hold both theoretical and practical significance, offering valuable insights to students, educators, and future researchers. The integration of Instagram and the 'News in Levels' App as a collaborative tool holds the potential to revolutionize traditional language learning paradigms. By fostering language skills alongside digital literacy and global awareness, this collaboration presents a pioneering pathway to holistic language education. The study ultimately contributes to a nuanced understanding of integrating contemporary SNS platforms into educational contexts, enriching the pedagogical landscape for EFL learners worldwide. In prospect, this study urges ongoing educational-tech-social media evolution.

Keywords: News in Levels, EFL Learners, Writing Skills, Collaborative



### The Mediating Role of Organizational Collaborative Culture in the Relationship between Leadership Qualities and Managerial Effectiveness

### Dan Dave A. Abaton

Bukidnon State University, Malaybalay, Philippines

### Abstract:

This study explores how organizational collaborative culture mediates the relationship between leadership qualities and managerial effectiveness in satellite campuses of higher education institutions, addressing the lack of studies combining these variables in the context of academic institutions, particularly in satellite campus settings. Leadership qualities, including conscientiousness, adaptability, integrity, and empathy, were examined for their influence on managerial effectiveness, which includes people management, task management, conflict management, and strategic management. Organizational collaborative culture, characterized by professional collaboration, affiliative collegiality, and self-determination, emerged as a significant mediator in this relationship. Using a descriptive quantitative, causal, and cross-sectional design, data were gathered from full-time teaching and non-teaching personnel across 12 satellite campuses of a state university in the Philippines. The results reveal that organizational culture partially mediates the relationship between leadership qualities and managerial effectiveness. This highlights the critical need for culturally responsive leadership strategies that align with organizational goals and values. These findings provide valuable insights for leadership development and support the proposal of a Managerial Effectiveness Framework tailored for academic institutions. This framework aims to enhance leadership and management practices in decentralized campus settings, ensuring that campus heads and leaders are equipped to foster both effective management and an organizational collaborative culture.



### Analysis of the Cognitive Domain of Climate Literacy in Science Teacher Pre-Service and Possible Improvements Using Rasch Analysis

### Supriyadi Supriyadi

Universitas Pendidikan Indonesia, Bandung, Indonesia

#### Andi Suhandi

Universitas Pendidikan Indonesia, Bandung, Indonesia

### Achmad Samsudin

Universitas Pendidikan Indonesia, Bandung, Indonesia

### Agus Setiawan

Universitas Pendidikan Indonesia, Bandung, Indonesia

#### Abstract:

This study analyzes the cognitive domain of climate literacy among Science Teacher Pre-Service, utilizing Rasch analysis to evaluate their understanding of key environmental concepts and identify potential areas for improvement. The data, collected from 337 respondents, comprised Likert-scale responses to statements assessing knowledge of carbon cycles, greenhouse gases, ozone depletion, and data interpretation skills. Descriptive statistics revealed that respondents demonstrated a moderate to high understanding, with average scores ranging between 3.5 and 4.2 on a five-point scale. Rasch analysis highlighted variations in item difficulty and person abilities, indicating a need to address gaps in specific cognitive domains, particularly in analyzing and communicating climate data effectively. The Wright Map illustrated an alignment between person abilities and item difficulties but exposed some gaps where item coverage was insufficient for highly capable respondents. Fit statistics suggested that a few items may require revision to ensure they consistently measure the intended constructs. These findings emphasize the importance of targeted interventions, including instructional strategies and curriculum enhancements, to strengthen climate literacy in teacher education programs. The study underscores the utility of Rasch analysis in diagnosing and improving assessment instruments for sustainable education.

Keywords: Climate Literacy, Cognitive Domain, Science Teacher Pre-Service, Rasch Analysis, Sustainable Education



### ESD Community Development for Teachers and Students Through the 40-Day Challenge Program

### Suhendar Suhendar

Department of Science Education, Universitas Pendidikan Indonesia, Indonesia

#### Ari Widodo\*

Department of Science Education, Universitas Pendidikan Indonesia, Indonesia

### Rini Solihat

Department of Biology Education, Universitas Pendidikan Indonesia, Indonesia

#### Riandi Riandi

Department of Science Education, Universitas Pendidikan Indonesia, Indonesia

### Anggun Zuhaida

Department of Science Education, Universitas Pendidikan Indonesia, Indonesia

#### Eliyawati

Department of Science Education, Universitas Pendidikan Indonesia, Indonesia

#### Abstract:

Global climate change and environmental degradation highlight the need for the implementation of Education for Sustainable Development (ESD) in schools. Gerakan ESD Indonesia initiated the 40-Day Challenge to build resilient ESD communities among teachers and students through concrete action projects that address the impacts of climate change. The program engages teachers and students in undertaking 40 days projects designed to foster student future-thinking skills and long-term sustainable action, with teachers as the main facilitators. This research aims to evaluate the strengths, weaknesses, challenges, and solutions faced during the implementation of the 40 Days Challenge. The program involved 737 students and 112 teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities. Teachers from 32 districts across Indonesia, with a focus on creating strong ESD communities across from 32 districts across from 32receive training in future-oriented learning techniques, including forecasting, scenario planning, and backcasting, to equip them to guide students in identifying and planning long-term solutions to sustainability challenges. The research methods used include an in-depth analysis of the program's strengths and weaknesses, identifying obstacles faced, and providing recommendations for further development. The findings show that the 40-Day Challenge effectively fosters sustainable habits in students through practical activities such the use of renewable energy, waste management, tree planting, and other activities in raising awareness of the importance of sustainability. Training for teachers increases their effectiveness as facilitators in guiding ESD projects, strengthening their skills in sustainable education. However, there are challenges, especially in remote schools with limited internet access and other resources, which hinder the delivery of digital-based programs. The duration of 40 days also causes difficulties in maintaining the commitment and consistency of participants. The study recommends follow-up actions, including local stakeholder engagement, infrastructure upgrades and technology support, and digital monitoring systems to streamline program evaluation and continuity. Overall, the 40 Days Challenge has proven to be effective in building strong ESD communities in Indonesian schools, with promising potential as a national model for sustainability education. The program is expected to equip the younger generation with important future-thinking skills and encourage active involvement in environmental sustainability efforts at the school and community of the school an

Keywords: ESD Community, Future-Oriented Learning, 40-Day Challenge



# The Influence of Santi Artificial Intelligence Chatbots on Enhancing Student Creativity

### Erna Widyasari

Master of Education al Administration, Faculty of Education, Muhammadiyah University of Surakarta, Surakarta, Indonesian Master of Education and Mas

### Budi Murtiyasa

Master of Education al Administration, Faculty of Education, Muhammadiyah University of Surakarta, Surakarta, Indonesia

### Eko Supriyanto

Master of Educational Administration, Faculty of Education, Muhammadiyah University of Surakarta, Surakarta, Indonesia

#### Abstract:

This article discusses the influence of Santi (Sains Bestie) artificial intelligence chatbots on enhancing student creativity. Artificial intelligence chatbots are computer programs designed to mimic human conversations. Chatbots can automatically respond to user questions and commands using artificial intelligence technology. For students, chatbots can become personal tutors that answer questions anytime and anywhere. This significantly aids students in deepening their understanding of the subject matter and fostering creativity. With its ability to access vast amounts of information, a chatbot can explain difficult concepts, provide example questions, or even help with assignments. This is very helpful for students in understanding the lesson material better and improving their creativity performance.

Keywords: Artificial Intelligence, Chatbots, Santi, Student Creativity, Educational Technology



# Transformation of Science Laboratory Learning from Conventional to Project-Oriented Laboratory: A Systematic Literature Review

### Febrian Andi Hidayat

Universitas Pendidikan Indonesia, Bandung, Indonesia

### Ida Kaniawati

Universitas Pendidikan Indonesia, Bandung, Indonesia

### Andi Suhandi

Universitas Pendidikan Indonesia, Bandung, Indonesia

#### Hernani

Universitas Pendidikan Indonesia, Bandung, Indonesia

### Lisa Dewi Ramadany

Universitas Pendidikan Indonesia, Bandung, Indonesia

### Abstract:

The transformation of laboratory learning in science education has become an important concern in the 21st century learning era. Project-based approaches offer innovative solutions to overcome the limitations of traditional learning by emphasizing the integration of theory and practice, collaboration, and the development of critical skills. This study aims to explore the application of project-oriented laboratories in science education through a systematic literature review. The review followed the PRISMA protocol, with data obtained from the Scopus database using relevant keywords. Articles were screened based on the inclusion criteria: they addressed project-based laboratories or practicums in higher education and were empirical studies. A total of 25 articles met the final criteria. The results showed that the project-based laboratory approach has been widely applied in engineering and pure science, but its implementation in science education is still very limited. This transformation requires relevant curriculum design, lecturer training, and project-based evaluation strategies. In addition, the integration of technologies such as virtual simulations and remote laboratories can support the success of this approach. This article concludes that project-oriented laboratories have great potential to improve the quality of science education by strengthening student engagement and learning outcomes. The review also offers recommendations for educators and institutions in implementing this innovative approach in the future.

Keywords: Project-Oriented Laboratory, Science Education, Practical Learning



### From Rhetoric to Reality: Investigating the Inclusiveness of Persons with Disabilities in Local Government of Bangladesh

### Rowshon Ara Romke

Assistant Professor, Social Science, American International University-Bangladesh, Dhaka, Bangladesh

### Abstract:

The inclusion of persons with disabilities (PWDs) particularly Physically Challenged Persons in the local governance structures of Bangladesh remains a significant challenge despite national and international commitments toward inclusivity. This exclusion is largely due to socio-cultural stigmas, insufficient legal frameworks and the lack of awareness about disability rights among local authorities. In this backdrop this study attempts—to see how far inclusion of Physically Challenged Persons is being implemented in the domain of local government. Accordingly, the prime objective has been set to assess the present scenario of Physically Challenged Persons' inclusion in local government and to unveil the problems they encounter and the prospects therein for effective inclusion of PWDs. A mixed method approach was applied combining both qualitative and quantitative methods consisting of sample survey among 100 Physically Challenged Persons, 50 Klls, 1FGD were conducted. The study brings into surface that hardly PWDs have any space or opportunity for their inclusion or participation in any form in the affairs of local government. Their voices are never heard, therefore government intervention in the form of policies, plans, projects and programs are being called for full inclusion of PWDs in the local government.

Keywords: Inclusion, Interventions, Local Government, Persons with Disabilities, Sustainable Development



# Women as Drivers of Philippine Rural Development: Analyzing the Role of Women Employment in Shaping Regional Poverty Dynamics and Human Development Using Seemingly Unrelated Regression

### Celso Gutierrez Tan Jr.

Department of Economics, Polytechnic University of the Philippines, Philippines

#### Array

Associate Professor, Department of Economics, Polytechnic University of the Philippines, Philippines

### Abstract:

This research investigates the role of female employment in influencing poverty dynamics and human development in rural areas of the Philippines. Despite advancements in gender equality legislation, traditional gender roles and conservative norms restrict women's workforce participation. By applying Social Role Theory and Gender Schema Theory, the study analyzes how these frameworks impact women's labor market experiences and socio-economic outcomes. Findings indicate a strong correlation between increased female employment and reduced poverty, as well as improvements in the Human Development Index (HDI). The research identifies barriers such as cultural expectations and limited access to education, proposing targeted policies like childcare support to enhance women's labor force participation. By addressing these socio-cultural challenges, the study aims to guide policymakers in promoting gender equality and economic development. Ultimately, it highlights how empowering women economically can lead to broader societal benefits, including poverty alleviation and improved human development outcomes in rural communities.

Keywords: Poverty Incidence, Women Employment, Women Labor Force Participation, Rural Development, Economics of Women Employment



# Dimensions of Investment Gullibility: Exploring the Ponzi Scheme Victims in Davao City

### William T Sucuahi

College of Accounting Education, University of Mindanao, Davao, Philippines

### Arrav

Associate Professor, College of Accounting Education, University of Mindanao, Davao, Philippines

### Abstract:

The Ponzi scheme that defrauded many persons has raised concerns. A recent scam that targeted thousands of people in the Davao Region made money by promising them a high return on investment. This study aims to identify the dimensions of investment gullibility among different generations in Davao City and develop a research framework demonstrating the extracted components' significance and structure. An Exploratory Factor Analysis (EFA) was used to investigate a data set of 250 respondents gathered through quota purposive sampling. The study found that the three dimensions of investment gullibility.

Keywords: Ponzi Scheme, Prospect Theory, Regret Aversion, Quality Education



# Thriving in the Digital Era: Technology Adoption, Competencies, and Culture on Higher Education Personnel Performance

### Marlie Joy G. Sigod

Bukidnon State University, Malaybalay, Philippines

#### Abstract:

 $In the digital \ era, non-teaching \ personnel \ in \ higher \ education \ institutions \ (HEIs) \ play \ a \ vital \ role \ in \ institutional \ effectiveness$ and advancing Sustainable Development Goals (SDGs), yet their performance remains underexplored. This study developed a structural model using Structural Equation Modeling (SEM) to examine the relationships between digital technology adoption, digital competencies, organizational culture, and their impact on non-teaching personnel performance in public Philippine HEIs in Bukidnon, Misamis Oriental, and Lanao del Norte. Data from 319 non-teaching personnel were collected through a 70-item survey assessing key performance indicators and predictors. Findings revealed that digital technology adoption indirectly enhanced performance by improving ease of use, although its direct effect was insignificant. Digital competencies and organizational culture emerged as critical drivers, with communication, collaboration, and innovation identified as the most impactful dimensions. Structural Model 3 was identified as the bestfit model, highlighting the collective influence of these factors on personnel performance. These findings contribute to SDG 4 by promoting digital literacy and professional development, SDG 8 through strategies for cultivating digitally proficient workforces, SDG 9 by emphasizing innovation and operational efficiency, and SDG 17 by fostering collaborative approaches to institutional improvement. The proposed SIGOD Framework, focusing on Skills in the Digital Era, Innovation in Culture, Growth in Professional Development, Optimization of Performance Metrics, and Data-Driven Decision-Making, provides actionable strategies to enhance performance. This study reaffirms the relevance of theoretical frameworks, including the Balanced Scorecard and Digital Competence Framework, in driving transformative institutional strategies and advancing global SDG commitments.

Keywords: Digital Competencies, Organizational Culture, Optimized Workforce Performance, Structural Equation Modeling, Philippine Higher Education Personnel Performance



### Profiling Gender-Based Disparities in Scientific Literacy Among STEM Students in the Division of Eastern Samar: Insights for Targeted Educational Interventions

### Roneil A. Campanero

Faculty, College of Education, Eastern Samar State University - Salcedo Campus, Salcedo E. Samar, Philippines

### Rica C. Elacion

Faculty, College of Education, Eastern Samar State University - Salcedo Campus, Salcedo E. Samar, Philippines

### Abstract:

This study investigated scientific literacy among Senior High School STEM students in the Division of Eastern Samar (rural area in the Philippines) which is also an adapted study from an international perspective, focusing on gender and grade level differences. Using validated questionnaires, four dimensions of scientific literacy were assessed that includes: (i) habits of mind, (ii) character and values, (iii) science as a human endeavor, (iv) metacognition/self-direction, and two categories in terms of: (i) methods of inquiry and (ii) interpreting quantitative data. Results revealed significant deficiencies in inquiry and data analysis skills, with most students scoring low. Grade 11 students outperformed Grade 12 students, suggesting a decline in literacy levels. Males slightly outperformed females, though both groups demonstrated inadequate overall performance. These findings highlight critical gaps in inquiry-based learning and data analysis instruction within the STEM curriculum. Recommendations include integrating technology-enhanced learning, project-based approaches, and gender-sensitive pedagogies to improve scientific literacy outcomes, bridge gender disparities, and enhance critical competencies among STEM students in the rural settings.

Keywords: Scientific Literacy, STEM Students, Gender Differences, Inquiry-Based Learning, Data Analysis Skills



### Novel Use of Deep Learning for Adaptive Weighted Loss in the Segmentation of X-ray Images for Detecting Wrist Fractures

### Teuku Radillah

Mitra Gama Institute of Technology, Indonesia

### Sarjon Defit

University of Putra Indonesia YPTK Padang, Padang, Indonesia

### Gunadi Widi Nurcahyo

University of Putra Indonesia YPTK Padang, Padang, Indonesia

### Abstract:

Image transmission technology has made significant contributions to various fields, especially medical imaging, which employs X-ray imaging to detect abnormalities in the human body, such as cracks and fractures. The image segmentation method is a computational method that can divide digital images into several segments with similar visual characteristics. This research proposes a novel image segmentation method for wrist fractures, utilising an adaptive weighted-loss approach. The objective is to enhance the precision of identifying wrist fractures on X-ray images, with the target being an accuracy of 71%, a precision of 78%, a recall of 85%, and an F1-score of 81%. This study addresses a significant gap in the literature by proposing an effective method for identifying wrist fractures, a task for which there has been a dearth of effective methods. The adaptive weighted-loss method with linear weights proposed in this study is expected to overcome the challenges posed by overfitting and correct class imbalance, thereby ensuring that the model is not overly dependent on a single loss function. This approach is anticipated to enhance the model's generalisation capabilities on test data.

Keywords: Dice Loss and BCE Loss method, Adaptive Weighted Loss, Wrist Fractures



# Novel Use of Deep Learning for Adaptive Weighted Loss in the Segmentation of X-ray Images for Detecting Wrist Fractures

### Muhammad Dahria

Triguna Dharma School of Informatics and Computer Management, Indonesia

### Sarion Defit

University of Putra Indonesia YPTK Padang, Padang, Indonesia

### Yuhandri

University of Putra Indonesia YPTK Padang, Padang, Indonesia

### Abstract:

The objective of this research is to develop an Internet of Things (IoT) system that is capable of monitoring shrimp pond water quality in real-time, with a focus on three main parameters: temperature, pH, and dissolved oxygen (DO). The system integrates hardware in the form of sensors and microcontrollers, as well as cloud-based software for data processing and visualization. The collected data underwent analysis using the Euclidean Distance and Weighted Euclidean Distance methods to calculate the distance between data, followed by a filtering process to filter relevant data based on proximity. The findings of the study demonstrate that the IoT system is capable of measuring water quality parameters with good accuracy and of automatically transmitting data to the cloud platform for further monitoring and analysis. The Weighted Euclidean Distance method provides more optimal results than standard Euclidean Distance, because it considers the weight of each parameter. It is hoped that this system can provide an innovative solution to support more efficient, data-based and sustainable shrimp pond management.

 $\label{lem:condition} \textbf{Keywords: Internet of Things, Water Quality, Shrimp Ponds, Euclidean Distance, Weighted Euclidean Distance, Real-Time Monitoring}$ 



### Enhanced Hydrophobicity of Sweet Potato Starch Bioplastic Reinforced with Activated Carbon

### Josef Vill S. Villanueva

Engineering Graduate Program, Department of Mechanical Engineering, School of Engineering, University of San Carlos, Cebu City, Philippines

### Virgilio Y. Abellana

Department of Mechanical and Manufacturing Engineering, School of Engineering, University of San Carlos, Cebu City, Philippines

### Abstract:

Sweet potato starch was employed to generate activated carbon-reinforced bioplastics in the study. Water absorption, solubility, and moisture analysis were used to investigate the hydrophobicity of sweet potato-based bioplastics. The samples were immersed in still distilled water for 24 hours to test water absorption. Water absorption was lowest in Sample B (7mL glycerin with 0.4g activated carbon) at 33.447% of weight gain and greatest in Sample F (11mL with 0g) at 41.578%. Water solubility was measured by stirring samples every hour for 24 hours. Sample B (7mL glycerin with 0.4g activated carbon) had the lowest water solubility with 11.434% weight loss, whereas sample F (11mL with 0g) had the greatest with 12.571%. Sample moisture was measured with the Satorius Moisture Analyzer. Sample G (11mL glycerin with 0.4g activated carbon) had the lowest moisture content at 18.72833%, whereas Sample F (11mL without activated carbon) had the highest at 22.391667%. The water absorption and solubility tests showed that activated carbon reinforcement increased bioplastic hydrophobicity.

Keywords: Activated Carbon, Bioplastic, Sweet Potato Starch, Water Absorption, Water Solubility



# Effect of Activated Carbon on the Mechanical Properties of Sweet Potato Starch Bioplastic

### Josef Vill S. Villanueva

Engineering Graduate Program, Department of Mechanical Engineering, School of Engineering, University of San Carlos, Cebu City, Philippines

### Virgilio Y. Abellana

Department of Mechanical and Manufacturing Engineering, School of Engineering, University of San Carlos, Cebu City, Philippines

### Abstract:

Plastic pollution caused by single-use plastics has been a growing concern for environmentalists. This study explored the properties of sweet potato bioplastic samples to address plastic waste, focusing on tensile strength. The researchers created bioplastic samples using a mixture of sweet potato starch, vinegar, glycerin, and water. Tensile testing of 24 sweet potato bioplastics revealed that samples containing 7 mL of glycerin consistently exhibited greater ultimate strengths compared to those with 11 mL of glycerin. Specifically, samples containing activated carbon and 7 mL of glycerin had the highest mean ultimate strength (0.567 MPa), whereas those with no activated carbon but 11 mL of glycerin had the lowest (0.1483 MPa). Additionally, the samples with activated carbon and 7 mL of glycerin demonstrated the highest modulus of elasticity (1.3332 MPa) and yield strength (0.3311 MPa). These findings suggest that sweet potato bioplastics, particularly those with activated carbon and 7 mL of glycerin, have the potential to be a strong and sustainable alternative to conventional plastics. The study underscores the importance of optimizing the composition of bioplastics to enhance their mechanical properties and promote environmental sustainability.

Keywords: Activated Carbon, Bioplastic, Sweet Potato Starch, Rupture Strain, Yield Strength



# Economic Contributions and Employment Effects of Sari-Sari Stores in Dumaguete City

### Ildefe T. Villanueva

Negros Oriental State University - Main Campus 1, Philippines

### Abstract:

Sari-sari stores are vital micro-enterprises in Dumaguete City, significantly contributing to the local economy through income generation and employment. This study examines their economic impact, focusing on household income, job creation, and their role in supporting community commerce. It analyzes the demographic profiles of store owners and employees, identifies challenges in sustaining these businesses, and evaluates strategies to address such challenges.

Additionally, the research explores the relationships between sari-sari store income and key factors, including the demographic characteristics of respondents, employee income, and operational challenges. By investigating these connections, the study offers insights into how sari-sari stores operate within Dumaguete's informal economy and contribute to its overall resilience.

The findings underscore the critical role of sari-sari stores in promoting economic development and fostering social cohesion. Despite facing challenges such as resource limitations, market competition, and restricted access to financing, store owners demonstrate innovative strategies to sustain their businesses.

This study provides actionable recommendations for strengthening the sustainability of sari-sari stores, emphasizing their potential to drive inclusive economic growth. Policymakers, business owners, and community leaders are encouraged to support these micro-enterprises to enhance livelihood opportunities and contribute to Dumaguete City's economic resilience.

Keywords: Economic Contribution, Employment Effects, Local Economy, Sari-Sari Stores



23

### An Inquiry to the Institutionalization of Esports as an Academic Program through the Lens of Edmund Burke's Enlightened Conservatism

### Dan Ryan P. Arlalejo

Student Researcher, College of Arts and Humanities, University of the Immaculate Conception, Davao, Philippines Daryl Sorronda Jr.

Student Researcher, College of Arts and Humanities, University of the Immaculate Conception, Davao, Philippines

### Mona L. Laya

Faculty Researcher, College of Arts and Humanities, University of the Immaculate Conception, Davao, Philippines

### Julie Ar E. Sibala

Faculty Researcher, College of Arts and Humanities, University of the Immaculate Conception, Davao, Philippines

#### Abstract:

This study focused to explore the feasibility of institutionalizing eSports as an academic program within college education, and the study utilized Edmund Burke's Enlightened Conservatism as a theoretical framework. Edmund Burke's theory of Enlightened Conservatism contributed perspectives into how gradual, value centric reforms can reinforce educational innovation without compromising the foundational principles of academic institutions. The study employed a qualitative  $type \, of \, design \, with \, descriptive \, analysis \, to \, gather in sights \, of \, relevant \, stake \, holders \, in \, Davao \, City. \, The \, researchers \, conducted \, and \, relevant \, stake \, holders \, in \, Davao \, City. \, The \, researchers \, conducted \, and \, relevant \, stake \, holders \, in \, Davao \, City. \, The \, researchers \, conducted \, and \, relevant \, stake \, holders \, in \, Davao \, City. \, The \, researchers \, conducted \, and \, relevant \, stake \, holders \, in \, Davao \, City. \, The \, researchers \, conducted \, and \, relevant \, relevant \, conducted \, and \, relevant \, relevant$ interviews with a group of five university administrators and five students actively participating in eSports programs such as varsity players and competitive gamers to gather the primary data. These individuals shared insights into the advantages and obstacles of integrating eSports as an academic program. The results uncovered themes including the institutional readiness, the necessity of technological and financial resources, faculty development, regulatory compliance, and student support. The administrators emphasized the significance of adhering to guidelines and standards while also expressing worries about the requirement for substantial investment in infrastructure and ongoing professional training for educators to adequately support eSports programs effectively. Both students and administrators underscored the advantages of eSports in paving a career path and its ability to captivate students by aligning with the evolving demands of the digital economy. Nevertheless, issues surrounding program longevity, faculty preparedness and the necessity for professional development surfaced as key aspects that merit careful deliberation. This study illustrated that by utilizing Burke's principle of rounded transformational change schools can carefully integrate eSports programs that match conventional educational principles while accommodating student preferences and technological progressions. The results laid the groundwork for establishments to create a standardized curriculum for eSports that backs up deliberate allocation of resources, enhancement of faculty skills and cooperation on regulations. In essence this strategy hinted at the possibility of integrating eSports into education in a sustainable manner equipping students, for the contemporary digital market while upholding academic rigor and stability.

Keywords: Esports, Edmund Burke, Enlightened Conservatism, Academic Program, Gamification, Philippines



### Exploring the Dark Side of Al in Design Education: Teachers' Perceptions and Concerns

### Sania Gulzar

Teacher Partner, Art and Design, Dot and Line

### Abstract:

24

This study examines the perceptions and concerns of design educators regarding the integration of Artificial Intelligence (AI) in design education, with a focus on its impact on student creativity, ethical awareness, and hands-on learning. Targeting design educators teaching design at Universities within Pakistan, the study employs a structured questionnaire to gather insights. Reliability is assessed using Cronbach's alpha, while content validity is ensured through expert review. Preliminary findings suggest that while AI introduces valuable tools for enhancing teaching and learning, educators are concerned about its potential to suppress creativity, reduce independent thinking, and challenge ethical decision-making. The study highlights the need for a balanced approach, advocating for educational frameworks that integrate AI responsibly while preserving essential design skills and ethics.



### Development and Acceptability of the E-nurse Patient Safety System Towards Technology Management

### Peter Arnold T. Tubayan

University of Southern Philippines Foundation, College of Health Sciences, Department of Nursing, Philippines

### Abstract:

Technology promotes patient safety by minimizing errors, reducing adverse responses, and increasing adherence to practice guidelines. Technology is a significant tool for enhancing healthcare quality and safety. The objective of this study is aimed to develop an e-nurse patient safety management system and determine its acceptability among staff nurses towards technology management using descriptive design utilizing quantitative approach. In achieving the objectives, the existing condition and the prior status of the patient safety management of the hospital were determined using the Hospital Survey on Patient Safety. In the system's development, technical requirements were embedded using Web systems, Phpmyadmin 8.0. PHP as a programming language and Codelgniter as the framework. Patient safety features were incorporated including safety policy, safety risk management, safety assurance and safety promotion. The study revealed significant findings highlighting that clinical leaders and managers promote patient safety and deal with patient safety issues reflecting a favorable perception from the staff nurses, and it showed that all hospital departments have good teamwork. In addition, there is frequent practice and involvement in the workplace regarding nurse communication, reporting of incidents, and appreciative of organizational and managerial support for patient safety. The study's findings, which were summarized in the staff nurses' evaluation of the E-nurse Patient Safety Management System, demonstrated a high level of user acceptance with the system. The users in this case were the staff nurses. One could legitimately conclude that the E-nurse Patient Safety Management System's acceptance serves as evidence of the soundness of the design.



# Navigating Inclusion: Unveiling The Lived Experiences of Parents with Children of Special Needs in Mainstream Classes

### Kyla May A. Calipayan

Student Researcher, College of Teacher Education (CTE), University of the Immaculate Conception, Davao, Philippines

### Meralyn N. Delos Santos

Student Researcher, College of Teacher Education (CTE), University of the Immaculate Conception, Davao, Philippines

### Vinci Joy Flores

Student Researcher, College of Teacher Education (CTE), University of the Immaculate Conception, Davao, Philippines

### Christopher C. Baldonado

Faculty Researcher, College of Teacher Education (CTE), University of the Immaculate Conception, Davao, Philippines

#### Porferia S. Poralar

Faculty Researcher, College of Teacher Education (CTE), University of the Immaculate Conception, Davao, Philippines

### Abstract:

Parents with children who have special needs and are enrolled in mainstream classrooms may feel that their children's specific needs are not met. This qualitative phenomenological research focuses on the challenges, coping mechanisms, and collaborative opportunities between the parents and the schools. Specifically, eleven parents who have at least one child diagnosed with Autism Spectrum Disorder Classic Autism (ASD) at the intermediate level (typically grades 4–6) enrolled in mainstream classes from the selected public elementary schools in Davao City were interviewed, and transcripts were analyzed using thematic analysis. Findings reveal that parents experienced challenges in mainstream education, like bullying and lack of teacher readiness. Parents also find their children having challenging behavioral patterns and lacking attention from the school and teachers. To cope with these challenges, parents accept their child's condition and receive a support system and religious and spiritual support. The parents realized acceptance was a foundational role and emotional empowerment was necessary.

Keywords: Special Education, Special Needs, Mainstream Classes, Parents, Philippines



### Innovative Approaches in Teaching Reading: The Flipped Classroom Model for EFL Students

### Zhao Jun

Faculty of Education and Liberal Studies, City University, Malaysia

### Mohamad Jafre Bin Zainol Abidin

Faculty of Education and Liberal Studies, City University, Malaysia

### Abstract:

This study explores the application of the Flipped Classroom Model in teaching reading to English as a Foreign Language (EFL) students in China. The traditional teacher-centered approach often limits students' engagement and comprehension, necessitating innovative methods to enhance reading proficiency. The Flipped Classroom Model, by shifting direct instruction outside the classroom and allocating class time for interactive learning, offers a promising alternative. This paper examines the effectiveness of this model in improving reading comprehension and engagement among Chinese EFL learners. A quantitative research design was employed, with data collected through surveys, interviews, and classroom observations. The findings indicate that students in the flipped classroom demonstrated higher levels of reading comprehension, engagement, and motivation compared to those in traditional settings. Key challenges, including access to technology and teacher readiness, were also identified. The study contributes to existing literature by validating the theoretical underpinnings of constructivist learning and self-determination theory in EFL contexts. It also highlights the need for further research on integrating emerging technologies and cultural adaptations in flipped learning environments. The results provide valuable insights for educators, policymakers, and researchers seeking to enhance EFL reading instruction through innovative pedagogical strategies.

Keywords: Flipped Classroom Model, EFL Reading Instruction



# Understanding Disruptive Innovation: A Meta-analysis of the Existing Literature and Its Ubiquity in Frontier Economy

### Md Azzajur Rahman

Independent University, Bangladesh

### Abstract:

In the era of disruptive innovation, the survival of companies often depends on their capability to embrace and continuously nurture innovation within the organization. Since the inception of the disruptive innovation theory in 1997 by Clayton Christensen, much academic literature has been engendered to evolve the theory and make it compelling over time. However, hardly any literature has emphasized enough to study companies (established or start-up) functioning in different industries. As a result, the practical implication of disruptive innovation theory is largely unexplored. Hence, there is a gap between theoretical framework and real-life business practices, hatching anomalies and discourse among critics from industry practitioners to academia. Particularly, disruptive innovation practices in the ed-tech, fin-tech, and e-commerce industries, presenting new value propositions in developing economies, are yet to be revealed significantly. The disruptive innovation in the organization often requires visionary leadership, a mindset to challenge the status quo, creative destruction, and dynamic management practices to empower disruptive thoughts to flourish. This study aims to unfold disruptive innovation from a practical perspective, highlight the required corporate ambiance, and conceptualize the theory against the backdrop of developing economies.



### Impact of Reflection on Developing Transferable Skills: A Qualitative Study

### Sheau Wen, Ong

Xi'an Jiaotong-Liverpool University, Suzhou, China

### Fong Wei, Diong

Universiti Tunku Abdul Rahman, Kampar, Malaysia

### Abstract:

Technological advancements are fundamentally reshaping the nature of work, demanding a skilled, tech-savvy, motivated, and adaptable workforce. This shift has placed significant focus on the role of higher education institutions (HEIs) in preparing students for the future labor market by identifying and responding to its needs, while ensuring graduate employability. HEIs are increasingly expected to boost graduate employability by improving their courses and equipping students with discipline-specific and transferable skills. Despite efforts to incorporate transferable skills into HEI curricula, a persistent gap remains between the skills students acquire and those required by employers. This study examines the impact of reflection on learning, a less explored area in journalism education. Specifically, it investigates how reflection influences student learning and development. By conducting a thematic analysis of reflective essays from postgraduate media and communication students at a Sino-Foreign joint venture university in China, this study aims to shed light on teaching practices and their impact on student learning. The findings have implications for educators and university administrators, emphasizing the importance of incorporating student perspectives on their university learning into planning and decision-making.

 $Keywords: Transferable \, Skills, Journalism \, Education, \, Reflection, \, Higher \, Education \, Institutions, \, Professionalism \, Albert \, Formula \, Formula$ 



# The Role of Data Privacy in Digital Marketing: The Reality Check of Consumer Perspective

### Md. Aminul Islam

Senior Lecturer, Department of Management Information Systems, School of Business and Entrepreneurship, Independent University Bangladesh, Dhaka, Bangladesh

### Abstract:

The growing concern over data privacy has significantly impacted digital marketing strategies in recent years. With the implementation of stringent data protection regulations such as the GDPR and CCPA, consumer trust has become a critical factor influencing the effectiveness of digital advertising. This research aims to explore the role of data privacy in shaping consumer attitudes and behaviors toward digital marketing. Specifically, it examines how privacy concerns affect consumers' engagement with personalized advertisements and their willingness to share personal data for targeted marketing purposes. Through a mixed-methods approach, this study combines quantitative analysis, including surveys and experimental design, with qualitative insights obtained from in-depth interviews with digital marketing professionals. The survey assesses consumer perceptions of data privacy and their preferences regarding personalized content, while the experimental design tests variations in user engagement across different levels of data transparency and privacy protection. The findings reveal that heightened awareness of data privacy significantly diminishes consumers' responsiveness to personalized advertisements and their trust in brands, particularly in industries with sensitive data usage. Furthermore, it identifies key practices that marketers can adopt to balance effective targeting with consumer privacy concerns, such as offering clear data usage disclosures and providing opt-in mechanisms. This study contributes to the understanding of how data privacy influences consumer behavior in digital marketing and provides actionable insights for businesses to navigate the evolving privacy landscape while maintaining customer trust and engagement.

Keywords: Consumer-Trust Data-Privacy, Digital-Marketing, Personalized-Advertising, Privacy-Regulations



# A Comparative Analysis of Stock Return for Amazon and Alibaba Based on Time Series Model and Control Chart

### Ruoyi Wang

School of Mathematical Sciences, Universiti Sains Malaysia, Minden, Malaysia

#### Mei Tuan Teng

School of Mathematical Sciences, Universiti Sains Malaysia, Minden, Malaysia

# Chia Yean Lim

School of Computer Sciences, Universiti Sains Malaysia, Minden, Malaysia

#### Abstract:

E-commerce giants Amazon and Alibaba significantly impact the global economy, but their stock return volatility presents challenges for investors and analysts. Traditional volatility models often fail to capture sudden fluctuations, necessitating systematic monitoring through control charts. This study aims to (1) evaluate the performance of the GARCH model in representing stock returns, (2) detect stock return volatility using residual-based control charts (RBCC), (3) compare stock returns between Alibaba and Amazon, and (4) determine whether fluctuations stem from natural market trends or special factors. Using daily opening prices from August 1, 2023, to July 31, 2024, stock returns are analyzed with a GARCH(1,1) model to estimate volatility. Residuals are then examined with Exponential Weighted Moving Average (EWMA) and Cumulative Sum (CUSUM) control charts to detect anomalies. By linking these anomalies to economic events, key drivers of stock return fluctuations are identified. Findings indicate that residual-based control charts effectively detect unusual stock return behaviors, highlighting their potential in financial market analysis. This study offers investors a systematic approach to monitoring stock volatility and contributes to financial research by demonstrating the effectiveness of RBCC in detecting structural market shifts and inefficiencies.



# An Enhanced Usability Evaluation Framework for Malaysia Higher Education Institution's Learning Management Systems

### Chin Keong Eric Loo

Universiti Sains Malaysia, Minden, Malaysia

#### Chia Yean Lim

Universiti Sains Malaysia, Minden, Malaysia

#### Nor Athiyah Abdullah

Universiti Sains Malaysia, Minden, Malaysia

#### Abstract:

Higher education institutions (HEIs) in Malaysia are adopting Learning Management Systems (LMS) to enhance the learning process, in alignment with worldwide trends. However, the absence of a standardized usability evaluation framework caused most HEIs to develop their own LMS, which requires an extensive learning curve for both lecturers and students' user groups to become adept. Despite there are many existing studies on the usability of LMS using different evaluation frameworks, none of them are practical to implement. This study aims to identify significant factors from past research and propose a usability design framework utilizing these factors to guide the LMS development among HEIs in Malaysia. Eventually, seven usability factors were identified, and an LMS prototype which complied with the proposed usability factors was developed. This research involved over 400 tertiary education lecturers and students across Malaysia where the participants were required to answer a questionnaire after they explored the LMS prototype. Pearson correlation analysis indicated that all the proposed usability factors have a positive and high to a very high significant relationship with the satisfaction with using the LMS among both lecturers and student groups. Finally, a usability design framework was constructed with five significant factors namely the efficiency, effectiveness, system status, aesthetic & minimalist design, and ease of use by using the multiple regression test's outputs. This research proposed an enhanced usability evaluation framework that guides the current educational institutions to develop a user-accepted LMS. It is envisioned that HEIs would adopt this proposed framework to increase their LMS users' satisfaction and improve teaching and learning quality, too. The output of this research also aims to establish a new standard for the auditing purposes of the Malaysian Qualifications Agency (MQA).



# Kindergarten Teacher Cognition and the Stress Paradox: Global Insights from a Two-Decade Bibliometric Exploration

#### Hansen Zhou

School of Educational Studies, Universiti Sains Malaysia, Minden, Malaysia

#### Wei Tian

Guanxi Science & Technology Normal University, China

# Hairul Nizam Ismail

School of Educational Studies, Universiti Sains Malaysia, Minden, Malaysia

#### Abstract:

Teacher stress has been extensively studied historically; however, most existing research emphasizes primary, secondary, and higher education contexts, while kinder gartente achers remain relatively under studied. Given the unique characteristics and higher education contexts, while kinder gartente achers remain relatively under studied. Given the unique characteristics are the context of theof early childhood education, kindergarten teachers encounter special psychological and cognitive challenges, which makes it necessary for academic researchers to deeper explore into their stress-related experiences. This study employs bibliometric techniques and analytical tools such as VOSviewer and CiteSpace within Web of Science and Scopus database. Results indicate a growing research interest in cognition-related factors, metacognition and cognitive flexibility, within kindergarten teacher stress research in recent years. Such factors are closely related to the stress coping, emotion  $regulation and teaching \,efficacy \,of \,kinder garten \,teachers. \,Literature \,cluster \,analysis \,further \,shows \,that \,the \,current \,research$ tends to integrate social cognitive theory, resource conservation theory and cognitive load theory, emphasizing the key role of cognitive factors in the formation and alleviation of stress in kindergarten teachers. In addition, the study also clearly pointed out that there is a relative lack of empirical research on cognitive intervention for kindergarten teachers, and more targeted and practical cognitive improvement programs should be explored in the future, including in-depth intervention experimental research, cross-cultural comparative analysis, and longitudinal research on how cognitive mechanisms affect teacher stress. The research results provide an important theoretical basis and practical guidance for in-depth understanding of the mental health protection mechanism of kindergarten teachers and the improvement of policy and practical intervention strategies in the field of early childhood education.



# Spatial Writing as a Critical Perspective in Contemporary Literary Studies: A Case Study of Shih Shuching's Novels

### **Huang Xin**

Universiti Putra Malaysia, Malaysia

#### Abstract:

Spatial writing has emerged as a significant analytical approach in contemporary literary research. This study examines the spatial writing strategies in Shih Shuching's novels, focusing on the intentionality of daily spaces and the dynamics between public and private spheres. Drawing on spatial theories from Bakhtin, Bachelard, and other critical theorists, the research delves into the nuanced spatial representations in Shih Shuching's literary works. Through a meticulous analysis of spatial narratives, the study reveals how Shih Shuching's intricate spatial writing not only portrays the complex social landscape of the city but also probes deeply into the complicated relationships between individual lived experiences and broader social structures. The research argues that space transcends mere narrative background, functioning instead as a generative field of meaning and a crucial dimension for comprehending literary texts. By interrogating the subtle interplays of space, identity, and social dynamics, this study contributes to a deeper understanding of Shih Shuching's literary aesthetics. It offers insights into the broader mechanisms of spatial representation in contemporary literature.



35

# Democratizing or Non-Democratizing India: Intra Party Experiences in Indian States

### Dr. Santwana Pandey

Assistant Professor, Department of Political Science, Guru Ghasidas Vishwavidyalya, Bilaspur, Chhattisgarh, India

#### Abstract:

Democracy has several meanings, some are hidden and the other are exhibited and in most of the cases it is most commonly and minimally associated with elections but actually it is more than that. The focus of the major part of the present democratic system has been shifted to conduct elections only in any manner irrespective of the declining status of the democratic values. Diagnosing the intra party culture, when the whole issue is discussed with the concerned stakeholders in both Brazil and South Asia, it has been identified that democracy with a system's ability to meet primary socio-economic needs rather than with predominantly procedural features. The present situation of crises which the democratic system is facing is the ability of electoral candidate to govern has become less important than other aspects and somewhere the realities of socio-political system that have not been able to be unearthed. Sometimes it becomes a matter of grave thinking whether we have been moving towards the process of democratization or non-democratizing the institutions and their functioning. Although we find the culture of intra party democracy in Indian political system in a very less quantum and the crises during pandemic also exaggerated the situation to become worse and the internal political parties' structural procedures have not remained untouched with it. The above mentioned facts are the basis behind conducting this experimental study in the times of inner party democratic transitions.

Keywords: Intra-Party, Democracy, Non-Democratization, Indian Political System, Transitional Democracy



# Unveiling Emotion Patterns Using Electrodermal Activity Amplitudes for Lightweight Emotion Recognition Models

#### **Betsy Chacko**

St. Thomas College (Autonomous), Thrissur, affiliated to University of Calicut, India

### Dr. Anil George K.

St. Thomas College (Autonomous), Thrissur, affiliated to University of Calicut, India

#### Abstract:

Emotion recognition through physiological signals has received a significant attention in the domains such as mental health, education, and human-computer interaction. The electrodermal activity (EDA), which is identified as a sensitive index of sympathetic nervous system, is found to be a widely preferred technique in analyzing emotional states.

This paper presents an exploratory analysis of minimally preprocessed and non-decomposed electrodermal activity signal amplitudes. It examines the potential of exploring raw time series data from EDA for emotion classification with reduced computational effort.

Analysis of electrodermal activity (EDA) data from the DEAP dataset, without prior signal decomposition, revealed that the average time series amplitude per emotion class exhibits characteristic trends and patterns. Results show that amplitude values within specific time ranges can enhance feature sets to identify and classify emotion according to 2D valence-arousal space. The proposed method is advantageous for lightweight emotion classification models where real-time monitoring and biofeedback are critical. This work provides valuable insights into advanced emotion recognition, paving the way for innovative applications within affective computing and related fields.



# Relationship between the Work Stress Levels of Remote Employees and Their Bosses' Leadership in a Service Company in Colombia

### Cristian Camilo Osorio Ordoñez

Corporación Universitaria Minuto de Dios, Colombia

#### Adrian Marcel Garcia Caicedo

Corporación Universitaria Minuto de Dios, Colombia

#### Abstract:

Despite advancements in research on work stress and its relationship with leadership, gaps remain in our understanding of how assertive leadership can mitigate employee stress. This study aims to delve deeper into this relationship by identifying the underlying mechanisms through which assertive leadership contributes to reducing workplace stress. Addressing this gap is crucial not only for improving employee well-being but also for strengthening organizational health, enhancing talent retention, and boosting business competitiveness.

The study, with a mixed-methods design and an explanatory scope, employs instruments such as an assertive leadership questionnaire and a work stress test using a Likert-type scale to measure the variables. The results indicate that higher levels of assertive leadership among supervisors are associated with lower levels of work stress among employees. Specifically, the findings revealed that:

Employees with mild stress tend to perceive high levels of assertive leadership.

Those with moderate or high stress often associate leadership with moderate levels.

Employees without stress present mixed perceptions of leadership, fluctuating between high and moderate levels.

These findings highlight significant patterns in the relationship between assertive leadership and work stress, underscoring the importance of fostering effective leadership as a strategy to improve the work environment and organizational well-being.



# Bilingualism, Auditory Stimulation, and Attention Swings in University Students

#### Yarlequé Chocas, Luis Alberto

Universidad Nacional Del Centro Del Perú, Peru

#### Javier Alva, Leda

Universidad Nacional Del Centro Del Perú, Peru

#### Nuñez LLacuachagui, Edith Rocío

Universidad Nacional Del Centro Del Perú, Peru

#### Gomez Chamorro, Elizabeth Angelina

Universidad Nacional Del Centro Del Perú, Peru

#### Paola Julia Parra Ocampo

Universidad Nacional Autónoma de Tayacaja Daniel Hernández Morillo, Peru

#### Abstract:

In Peru, Spanish is spoken alongside 48 native languages, and many speakers of these languages currently attend universities. Additionally, increased access to mobile phones and laptops has fostered the habit of studying while listening to music among students. In this context, this study was conducted to determine whether bilingual students experience more or fewer attention fluctuations than their monolingual counterparts and whether studying while listening to music affects them. This research employs a quantitative approach, utilizing an experimental laboratory method. The study involved two groups of university students—one bilingual and the other monolingual—from five universities in the departments of Junín and Huancavelica, who voluntarily participated in the experiment. Attention fluctuations were assessed using a digital tachistoscope during a focused attention task. The experiment was conducted under two conditions: with and without auditory stimulation. The results indicated, among other findings, that there are no statistical differences in intragroup comparisons (with and without auditory stimulation). However, differences emerge when comparing bilinguals to monolinguals. In conclusion, studying while listening to music does not affect students' attention, whether bilingual or monolingual. Nonetheless, being bilingual appears to present a disadvantage compared to monolinguals, at least concerning attention fluctuations.



39

# Perception of Learning ESL in Students of Mining Engineering Professional Schools in Peru

### Paola Julia Parra Ocampo

Universidad Nacional Jorge Basadre Grohmann, Tacna, Peru & Universidad Nacional Autónoma De Tayacaja Daniel Hernández Morillo, pampas, Peru

#### Rina María Álvarez Becerra

Universidad Nacional Jorge Basadre Grohmann, Tacna, Peru

#### Abstract:

Mining engineering is one of the most in-demand fields of higher education since mining is the main economic activity in Peru. According to INEI Silva, (2021), in Peru, the most preferred university career in the population aged 17 and over responded to Engineering with 20.5%, among others. This research aims to establish the importance of ESL for national and international competitions and demonstrate, in this case, the feasibility of why teachers should involve English in their daily pedagogical work. In addition, it will analyze the perception of English language proficiency in the learning process for professional development in the professional school of Mining Engineering. The data to be collected were from a cross-sectional design with a survey methodology, using an expost facto design, with open questions that allowed a qualitative analysis. We worked with a sample of 30 students from UNAM (Moquegua) and UNSA (Arequipa) in 2023 and an analysis with surveys from 2019 to the same schools of which, at UNAM: at the basic level, the pass rate remained relatively stable, with a slight improvement in 2023. At UNSA: At the basic level, there was a significant improvement in the pass rate and a reduction in the fail rate in 2023, suggesting improvements in teaching or the preparation of students at this level and an instrument of open questions to 5 specialist's interviewers.



# Trade Openness, Tariffs, and Economic Growth: An Empirical Study from Countries of E-7

#### Jayanthi M

Assistant Professor, School of Management, Sastra Deemed University, Thanjavur, India

#### Agnus Infanta B

Assistant Professor, School of Management, Sastra Deemed University, , Thanjavur, India

#### Abstract:

Introduction: Trade openness plays a crucial role in shaping economic growth, particularly for emerging economies that are actively integrating into global markets. The Emerging-7 (E-7) economies—China, India, Brazil, Russia, Indonesia, Mexico, and Turkey—collectively contribute significantly to global trade and economic expansion. Given the ongoing debate on the impact of trade liberalization and protectionist policies, this study aims to analyze the relationship between trade openness, tariffs, and economic growth within the E-7 countries. The key objectives of this research are:

- 1. To examine the long-term and short-term effects of trade openness on economic growth in E-7 economies.
- 2. To assess the impact of tariffs on GDP growth and determine whether high tariff barriers hinder or promote economic performance.
- 3. To provide policy recommendations based on empirical findings for fostering sustainable growth through trade policies.

**Methodology:** The study employs a panel data econometric approach, covering annual data from 1995 to 2023 for the E-7 countries. The data is sourced from the World Bank, the International Monetary Fund (IMF), and the World Trade Organization (WTO). The methodology follows these steps:

- Descriptive Statistics & Correlation Analysis: To understand trade patterns, tariff structures, and GDP trends across
   F-7 nations
- Unit Root Tests: Using Levin-Lin-Chu and Im-Pesaran-Shin tests to check for stationarity in time-series data.
- Panel Cointegration Analysis: Conducted to examine the long-run relationship between trade openness, tariffs, and GDP growth.
- Econometric Model: The study employs a dynamic panel data model using the Generalized Method of Moments (GMM) estimator to address endogeneity concerns. The model is specified as follows:

$$GDP_{it} = \alpha + \beta_1 TO_{it} + \beta_2 Tariffs_{it} + \beta_3 FDI_{it} + \beta_4 HC_{it} + \beta_5 INF_{it} + \varepsilon_{it}$$

### Where:

- GDP<sub>it</sub> = Economic growth (Real GDP per capita)
- $TO_{it}$  = Trade Openness (exports + imports as % of GDP)
- Tariffs<sub>it</sub> = Average applied tariff rate (%)
- FDI<sub>it</sub> = Foreign Direct Investment inflows (% of GDP)
- HC<sub>it</sub> = Human Capital Index (education-adjusted labor force)
- INF<sub>it</sub> = Inflation rate (CPI)
- ε<sub>it</sub> = Error term



41

**Key Findings and Outcomes:** The empirical results provide significant insights into the role of trade openness and tariffs in shaping economic growth in E-7 economies:

- 1. Trade Openness and Growth: A positive and statistically significant relationship is observed between trade openness and GDP growth, indicating that higher trade integration accelerates economic expansion.
- 2. Tariffs and Growth: The impact of tariffs varies across countries. While moderate tariffs provide domestic industries with protection, excessive tariffs negatively impact GDP growth by restricting trade inflows.
- 3. Short-run vs. Long-run Effects: Short-term results suggest that abrupt tariff changes create economic volatility, while in the long run, liberal trade policies support sustainable growth.
- 4. Policy Implications: The study recommends a balanced approach, where selective trade liberalization and strategic tariff policies can optimize economic outcomes without compromising domestic industries.

Conclusion: This research confirms that trade openness is a critical driver of economic growth in E-7 economies. However, the role of tariffs is complex and varies depending on national policies and economic conditions. Policymakers should adopt a nuanced strategy, balancing openness with targeted protectionist measures to foster inclusive and sustainable development.

Keywords: Intra-Party, Democracy, Non-Democratization, Indian Political System, Transitional Democracy



# Qualitative Research in the World, A Bibliometric Study from Scopus

#### Rivas-Huaman, Rolly

Universidad Tecnológica del Perú, Perú

#### Abstract:

This bibliometric study examines the global evolution of qualitative research from 1951 to 2009, aiming to identify trends in scientific production, key authors, geographical distribution, and leading publication sources. Using Scopus as the primary database and Bibliometrix software for data processing, filters were applied to select 19,125 relevant documents. Results indicate a steady increase in qualitative research output, with significant growth from the 1990s onward, reflecting greater acceptance of qualitative approaches across disciplines, particularly in social sciences and health. Additionally, a small group of highly prolific authors, including Sandelowski, McGrath, and Malterud, have played a crucial role in methodological advancements. Geographically, research is predominantly concentrated in English-speaking countries such as the United States and the United Kingdom, whereas Latin America, Africa, and Asia remain underrepresented, revealing persistent inequalities in scientific visibility and production. Furthermore, the most influential journals in qualitative research were identified, with Qualitative Health Research and Social Science & Medicine leading in publication volume. However, limitations such as the exclusion of other databases and the study's time frame may restrict the identification of recent trends. In conclusion, while qualitative research has gained academic prominence, challenges remain in ensuring equitable knowledge production and dissemination, highlighting the need for strategies that foster greater inclusion of underrepresented scientific communities.

Keywords: Qualitative Research, Bibliometric Analysis, Scientific Production, Research Impact, Social Sciences



# Enhancing Personal Safety: The Need for Context-Aware, Automated Threat Detection Systems

### Pratishtha Srivastava

Department of Design, PES University, India

### Harshit Kumar Gupta

Department of Design, PES University, India

#### Abstract:

Existing safety tools may not always be effective in high-stress or dangerous situations due to their reliance on manual activation, which may not be possible when individuals are distressed or physically restrained. These tools cannot autonomously detect threats in real-time, limiting their effectiveness in critical moments. As a result, there is a fundamental gap in existing safety mechanisms, highlighting the need for proactive solutions that can independently assess and respond to potential hazards.

This study examines the limitations of current safety technologies and emphasises the necessity for intelligent, context-aware systems capable of detecting risks and initiating automated responses. By eliminating the dependence on user intervention, such systems can enhance personal security, providing a more reliable and efficient safety solution during emergencies.

Keywords: Personal Safety Tools, Threat Detection, Automated Response, Real-Time Risk Assessment, Context-Aware Safety Systems



# A Review on 2H-benzo[b] [1,4] oxazin-3(4H)-one Novel Derivatives

#### Palla. Sai Lakshmi

Department of Pharmacy, Chaitanya Deemed to be University, Hanamakonda, Telangana State, India

### Puligilla. Shankaraiah\*

Department of Pharmacy, Chaitanya Deemed to be University, Hanamakonda, Telangana State, India

### Abstract:

The biological activities and different synthetic techniques of 1,4-benzoxazinone derivatives are presented in this review. Pharmacological development has utilised benzoxazinones and some of their derivatives. Benzoxazinone skeletons are among the most promising natural sources of bioactive compounds due to their accessibility, versatility, and relative chemical simplicity. Compounds with cyclic hydroxamic acids have been found in literature to be involved in plants' defence against weeds, fungi, and insects. Compounds based on 1,4-benzoxazinone are being developed as possible novel medications. To create novel 1,4-benzoxazinones, researchers employ a variety of synthetic techniques, including nucleophilic substitution, one pot chemo selective, N-alkylation, microwave-assisted palladium-catalysed intramolecular direct arylation, and smiles rearrangement.

Keywords: Benz oxazinone, N-alkylation, Arylation, Nucleophilic Substitution



# Petroleum Quality Prediction and its Optimization: Development of Optimized Fuzzy Control Charts for Enhancing the Petroleum Quality

#### Vipin Kumar

Research Scholar, Science Chemistry, Singhania University Rajasthan, India

#### Abstract:

The petroleum industry requires stringent quality control procedures for conventional Statistical Process Control (SPC) techniques tend to be unsatisfactory in dealing with imprecise and uncertain data and thus cannot provide the optimal solution in intricate petroleum processing scenarios. This paper reviews the enhanced fuzzy control charts for enhancing petroleum quality monitoring through effective control of process variation under uncertainty. Optimization methods such as AI-based tuning, adaptive thresholding, and hybrid machine learning that enhance the accuracy and reliability of control charts. In addition, fuzzy logic is integrated with the conventional SPC techniques in the critical performance metrics like detection sensitivity, false alarm rates, and process condition flexibility. The findings demonstrate that fuzzy control charts optimized using fuzzy logic are superior to conventional methods because they are more accurate, variable, and steady in identifying process anomalies. AI-based fuzzy models also enhance performance by reducing false alarms and control limits adjusted adaptively based on real-time variations. The interaction between evolutionary algorithms and deep learning models improves the forecasting ability, and very effective at optimizing operations, fuel blending, and contamination detection. Further involvement of AI, fuzzy logic, and big data analytics will transform to make it efficient and sustainable for petroleum quality prediction.

Keywords: Petroleum Quality Control, SPC methods, Fuzzy-control, Al-Based models



# Investigating the Influence of Liquidity Risk on Bank's Financial Performance: Empirical Evidence from the Philippines

#### Joy C. Lawenko

University of the Cordilleras, Gov. Pack Road, Baguio City, Philippines & Bicol University-Daraga Campus, Rizal St., Daraga, Albay, Philippines

#### Abstract:

Liquidity risk is a crucial factor that can impact the performance of banks, particularly in the rural banking sector. This article investigates the influence of liquidity risk on the financial performance of 92 Philippine rural banks from 2018 to 2022. The study employed descriptive data and quantitative methods, including financial ratios and Pearson r correlational research design. The data used is secondary data. Liquidity risk is measured using the loan-to-deposit ratio, and financial performance is measured using the return on equity ratio. The study used asset-liability management and liquidity preference theory frameworks, which provide a theoretical lens to understand the dynamics between liquidity risk and a bank's financial performance. The findings suggest no significant relationship between liquidity risk and bank performance, indicating that liquidity risk may not be a primary driver of financial outcomes for these institutions. The results of this study elucidate the intricate relationship between risk and performance in the rural banking sector, which can inform policy and strategic decisions to enhance the financial stability and viability of these critical community-based financial institutions. Future research should adopt a multi-faceted approach to investigate the determinants of financial performance in Philippine rural banks such as predictive models by simultaneously examining the influence of a comprehensive suite of factors. This may include, a wider array of financial ratios beyond loan-to-deposit and return on equity, encompassing capital adequacy, asset quality, and efficiency metrics.

Keywords: Liquidity Risk, Loan-to-Deposit, Return on Equity, Financial Performance, Rural Banks in the Philippines



# Understanding the Principles of Digital Photography in Syariah Investigations: A Systematic Literature Review

### Farihan Zahari

Art Design, UiTM Shah Alam, Malaysia

#### Abstract:

Digital evidence is now increasingly relevant and becoming a wide-ranging issue, such as crimes committed and the movement of suspects and criminal associates in different forms of crimes for investigation process. The field of Syariah law also employs digital evidence in its investigations and prosecutions of Mal or Syariah offense cases. However, the practice of digital evidence primarily focuses on digital photographs; it remains problematic and receives insufficient attention when evidence is not recorded appropriately, thereby impacting the investigation and prosecution process. This study focuses primarily on understanding the principle of digital photographs in the investigation process. This study adopts the systematic literature review methodology and successfully finds 47 related articles from online published journals. Data was collected and analyzed by adapting inductive reasoning using the method of content analysis. Understanding the principle of digital photography itself is crucial to ensure its use as evidence in the investigation process.



# From Concept to Market: Perceptions, Market Potential, and Branding Elements of an Alugbati (*Basella alba*) and Cocoa (*Theobroma cacao*)-based Chewing Candy for Athletic Performance

### Clyde Derek M. Garanchon

Silliman University, Dumaguete, Philippines

# Noah V. Catan

Silliman University, Dumaguete, Philippines

### Chase D. Cuyacot

Silliman University, Dumaguete, Philippines

### Jan Cynth L. Palama

Silliman University, Dumaguete, Philippines

#### Abstract:

The demand for sports products has risen as consumers increasingly seek proper nutrition and lifestyle choices. However, many energy-boosting products contain synthetic ingredients, raising health concerns, particularly among student-athletes. This study explores a natural alternative in the form of a chewing candy made from alugbati (Basella alba) and cocoa (Theobroma cacao). It aims to evaluate student-athletes' initial perceptions, the product's market potential, branding elements, and factors influencing consumer acceptance. A mixed-methods approach, using concurrent triangulation, was employed. Data was collected through focus group discussions and structured surveys, analyzed via thematic analysis, frequency tabulation, weighted mean computation, and a reliability test (Cronbach's alpha). The results revealed that while student-athletes were unfamiliar with alugbati's functional benefits and uncertain about the product's effectiveness, they expressed willingness to tryit, provided there was clear health transparency. Initial acceptability and adaptability were high, suggesting strong market potential. Barriers and facilitators to consumer acceptance were identified, and the product's branding elements were found to be visually appealing. This study promotes the use of underutilized local ingredients in food products, contributing to sustainability and resource expansion within the industry.



# Kotak Nusantara: A Montessori-Based Play Medium for Introducing Cultural Literacy to Children Aged 5-6 Years

### Rina Jayani, Sri Wulan

Universitas Negeri Jakarta, Indonesia

#### Nurbiana Dhieni

Universitas Negeri Jakarta, Indonesia

#### Abstract:

The motivation for this research stems from the concern that many young learners still lack awareness of their ethnic backgrounds and traditions, a phenomenon observed particularly in Jakarta. Indonesia, being an archipelago, requires a strong foundation of respect to uphold harmony among its people. Thus, Cultural literacy is essential in early childhood development, particularly in shaping national identity and fostering an appreciation for diversity. The study revealed that the use of Montessori-based play media integrating Indonesian cultural values remains limited. To bridge this gap, a Montessori-based play media called *Kotak Nusantara* or Nusantara Box play medium was developed to enhance early childhood cultural literacy through interactive exploration, inspired by Montessori principles. This research employed the Research and Development (R&D) method developed by Borg and Gall, involving teachers and children aged 5–6 years at Aluna Montessori Inclusive School over a two-month period. Findings from the study show that Kotak Nusantara or Nusantara Box play medium, effectively introduces Indonesian cultural literacy to children aged 5–6 years and facilitates teachers in making cultural education more interactive.



# Development And Acceptability of Instructional Materials in Methods of Research for Entrepreneurship using Computer-Assisted Instruction

#### Rozalle H. Palacol

Laguna State Polytechnic University, Philippines

#### Mia V. Villarica

Laguna State Polytechnic University, Philippines

#### Abstract:

The research evaluates the acceptability and effectiveness of instructional materials used in the "Methods of Research for Entrepreneurship" course across four Bachelor of Science in Entrepreneurship (BSE) classes. The results indicate a high level of acceptability for the instructional materials, with average ratings ranging from 4.70 to 4.84, categorized as "Highly Acceptable." An impressive improvement in student performance was observed from pretest to posttest across all sections, with t-values indicating statistical significance at p < 0.001. These findings suggest that the instructional materials significantly enhance student learning outcomes, leading to a better understanding and application of the Methods of Research for Entrepreneurship course. This research contributes to the formulation of effective pedagogical strategies for entrepreneurship education, highlighting the significant role of methodically designed instructional materials in improving student performance.

Keywords: ADDIE Model, Computer Assisted Instruction, Research, Instructional Materials



# Competence of Day Care Workers: Basis for Higher Education Institution's Extension Project Development

#### Delma Jean V. Abad

Camarines Norte State College, Philippines

#### Eduardo M. Abad

Camarines Norte State College, Philippines

#### Maria Elena A. Bidar

Camarines Norte State College, Philippines

#### Abstract:

In the Philippines, preschool for children aged 3 to 4 is not mandatory. However, the government promotes early childhood education through barangay day care centers nationwide, established under Republic Act 6972. This act supports the development and protection of children up to six years old. In the context of this study, the 42 Day Care Workers (DCWs) serving in the 25 Barangays were the respondents. This study employed a descriptive quantitative research design to determine the perceived extent of training received, competence, challenges encountered, and the preferred training programs of the DCWs through an expert-validated survey questionnaire. The findings revealed that the DCWs perceive themselves as having strong training in curriculum planning but are less confident in child development care procedures. While they believe they are competent in content knowledge and managing learning, they admitted to having only a fair understanding of pedagogical approaches and curriculum design. Moreover, the DCWs indicated that, although they view various teaching challenges as moderate, they consider challenges related to having concrete and comprehensive content knowledge and the process of curriculum design as key areas that need attention to enhance their proficiency. As a result, they prioritized training in first aid administration, health and nutrition, child development, and curriculum planning as the top areas for their professional development. After identifying the situation and needs, a proposed DCW-TEACH Extension Program (Day Care Workers Training for Education and Child Health) was designed, anchored on the Theory of Riffle Effect to enhance their services.



# The Future of Learning: A Literature Review on the Effectiveness of Montessori and Project-Based Learning

### Ikrima Adawiyah

Postgraduate Student, Faculty of Education, Universitas Negeri Jakarta, Indonesia

#### Abstract:

Montessori and Project-Based Learning (PjBL) are two educational approaches gaining popularity due to their emphasis on independence, exploration, and active student engagement in the learning process. However, the effectiveness of these methods remains a topic of discussion in various studies. This study aims to analyze the effectiveness of Montessori and PjBL in early childhood and primary education through a literature review of published research. The method used is a literature review, examining various scholarly sources related to the implementation of these approaches, their benefits for children's cognitive and social development, and the challenges faced in their application. The findings of this study are expected to provide deeper insights into the optimal implementation of Montessori and PjBL, as well as offer recommendations for refining these learning methods to enhance their effectiveness and sustainability. These findings are also relevant to the development of educational technology, which can support these approaches in improving learning outcomes.

Keywords: Montessori, Project-Based Learning, Effectiveness, Literature Review, Sustainable Learning.



# An Analysis of the Impact of Knowledge Management on Internal Marketing in Healthcare: A Case Study of a UAE Hospital

#### Malini Nair

Lecturer, Higher Colleges of Technology, Sharjah, United Arab Emirates (UAE)

#### Abstract:

This research aims to investigate the influence of knowledge management (KM) on internal marketing (IM) within a single hospital in the United Arab Emirates (UAE). As the demand for high-quality healthcare services continues to grow, the integration of KM and IM has become increasingly important for the success and competitiveness of healthcare providers (Nonaka & Takeuchi, 1995; Rafiq & Ahmed, 2000). This study adopts a qualitative case study approach, focusing on a prominent hospital in the UAE. In-depth interviews and focus groups will be conducted with employees and managers from various departments within the hospital to explore the strategies and practices employed to leverage KM for enhancing IM.

Data gathered from the interviews and focus groups will be analyzed using thematic analysis, which will allow for the identification of common themes and patterns in the participants' experiences (Braun & Clarke, 2006). The findings of this study will contribute to the existing literature on KM and IM in the healthcare sector, particularly in the context of the UAE (Alvesson, 2012; Ramadan, 2017). Moreover, the research will offer valuable insights for healthcare managers and policymakers seeking to improve internal marketing and foster a knowledge-sharing culture within their organizations (Grant, 1996; Tseng & Lee, 2014).

Keywords: Knowledge Management, Internal Marketing, UAE, Healthcare services, Case study



# Profile of Socio-Emotional Issues of Gifted and Talented Students: A Counselling Approach Strategy

### Tengku Elmi Azlina Tengku Muda

Lecturer, National University of Malaysia, Malaysia

#### Abstract:

Asynchronous development has caused socio-emotional conflicts among Gifted and Talented Students when their social and emotional abilities do not develop parallel with their intellectual abilities. Therefore, this study aims to identify and explore the socio-emotional issues faced as well as the effects of the problems and the factors that influence them. This study uses a mixed-method research method and a total of 217 students consisting of students from Basic 1 to Level 2 at Pusat Genius@Pintar Negara, UKM. This study used the Student Socio-Emotional Stress (ITSeP) instrument, The Overexcitability Questionnaire-Two (OEQII) and Multidimensional Perfectionism Inventory. The results of the study related to the perfectionism recorded a high score for all components where the component of the self-perfection is the highest component (4.58) and the component for perfectionism towards others is the lowest (4.08). The results of the study related to overexcitability showed that the emotional component recorded the highest value (3.75) and the psychomotor component as the lowest value (3.13). As for the emotional stress analysis, the justice stress component recorded the highest value (4.07) while the family stress component was the lowest value (2.29). Qualitative findings show that the factors that trigger socio-emotional problems are caused by personal personality, genetics and the environment that ultimately affect daily life. Based on the socio-emotional issues that have been identified, a specialized counselling approach has been implemented for gifted and talented students to enable effective counselling services to be provided based on the students' needs.

Keywords: Socioemotional, Student, Gifted And Talented, Counselling Approach



# Employment Outcomes and Curriculum Alignment in Computer Studies at a State University A Tracer Study Employing the MIMI Interview Method

### Mia V. Villarica

College of Computer Studies, Laguna State Polytechnic University, Santa Cruz Campus, Philippines

#### Maria Laureen B. Miranda

College of Computer Studies, Laguna State Polytechnic University, Santa Cruz Campus, Philippines

#### Abstract:

Higher education institutions aim to offer students a high-quality education and meaningful opportunities that enable them to grow into engaged and well-rounded members of society. This study examines the present employment situation, explicitly exploring the significance and impact of program outcomes and university services on graduates' personal and professional growth. The research collected quantitative data through an online survey with 246 respondents and qualitative data through Mobile Instant Messaging Interviews (MIMI) involving 55 participants. Most of the graduates' current employment was found to be closely aligned with the programs they completed. Several courses were particularly valuable in developing skills such as working under pressure, teamwork, discipline, socializing, and communication, which are highly relevant to their jobs.

Furthermore, the curriculum and instruction were identified as strengths in facilitating employment placement, and the respondents perceive themselves as responsible and ethical individuals. The most noteworthy finding is that alums aspiring to establish businesses favor entrepreneurship and freelance work. Integrating international perspectives and trends, such as hybrid work models, into the curriculum is recommended to contribute to a more comprehensive and enriched educational experience for students.

Keywords: Computer Studies Graduate Tracer, MIMI, Hybrid work models, Educational Internationalization



# Precarity and Protection: Addressing Working Conditions on Digital Labor Platforms in Malaysia

#### Siti Suraya Abd Razak

Faculty of Management, Universiti Teknologi Malaysia, Johor, Malaysia

#### Amira Farain Azman

Faculty of Management, Universiti Teknologi Malaysia, Johor, Malaysia

#### Abstract:

The rise of digital labor platforms in Malaysia has redefined the nature of work, offering flexible income opportunities while simultaneously presenting new challenges to decent work standards. This article examines the working conditions of platform workers; particularly those engaged in location-based services such as ride-hailing, food delivery, domestic care, and other on-demand tasks. Drawing from recent empirical studies, policy documents, and interviews with platform workers, this paper highlights the structural vulnerabilities inherent in algorithmically managed work, including job security, unpaid compensation and administrative burden and high risk of safety and well-being. The paper further analyzes the regulatory gaps in Malaysia's current labor framework that contribute to the precarious status of platform workers, who often fall outside traditional definitions of employment. In response to these challenges, the article explores strategies strategies and reforms to improve the structure and operation of digital labour platforms in Malaysia. By critically engaging with both the issues and potential reforms, this study aims to contribute to the discourse on fair work in the digital economy and propose actionable recommendations for policymakers, platform operators, and labor advocates. The article concludes by emphasizing the urgent need for an adaptive legal framework that safeguards the rights and welfare of digital platform workers in Malaysia's evolving labour market.

Keywords: Digital Labour Platform, Platform Worker, Gig Economy, Employment Rights, Social Security Protection



# Print2Type: Revolutionizing Blood Group Detection Through Fingerprint Analysis and ML

### Manish Goswami

Rashtrasant Tukadoji Maharaj Nagpur University, Computer Science and Engineering, S B Jain Institute of Technology, Management & Research, Nagpur, India

### Bhuvan Patil

Rashtrasant Tukadoji Maharaj Nagpur University, Computer Science and Engineering, S B Jain Institute of Technology, Management & Research, Nagpur, India

#### **Aniket Mishra**

Rashtrasant Tukadoji Maharaj Nagpur University, Computer Science and Engineering, S B Jain Institute of Technology, Management & Research, Nagpur, India

#### Prantik Deodhagale

Rashtrasant Tukadoji Maharaj Nagpur University, Computer Science and Engineering, S B Jain Institute of Technology, Management & Research, Nagpur, India

### Dhanshri Supratkar

Rashtrasant Tukadoji Maharaj Nagpur University, Computer Science and Engineering, S B Jain Institute of Technology, Management & Research, Nagpur, India

#### Vishakha Padole

Rashtrasant Tukadoji Maharaj Nagpur University, Computer Science and Engineering, S B Jain Institute of Technology, Management & Research, Nagpur, India

#### Abstract:

This paper presents Print2Type, a novel machine learning-based system that predicts an individual's blood group using fingerprint analysis. Traditional blood typing requires invasive sampling, specialized reagents, and laboratory equipment, whereas our approach leverages image processing and classification algorithms to identify subtle biometric patterns that correlate with blood type, offering a non-invasive, rapid, and scalable solution for blood group detection. Using a dataset of 6,000 fingerprint images across eight blood groups, we developed a CNN model incorporating image enhancement and feature extraction techniques. Our system achieved 91 percentage test accuracy with sub-second inference time, demonstrating the feasibility of biometric-based blood group determination which is a comfortable alternative for clinical diagnostics, remote healthcare, and emergency situations where conventional blood typing is challenging or unavailable.

Keywords: Blood Group Detection, Fingerprint Analysis, Convolutional Neural Networks, Non-Invasive Diagnostics, Machine Learning, Biometrics



# Moderating role of Entrepreneurial Intention on the relationship between Entrepreneurial Education and People Management Skills

#### Abdullah Al Ahad

Independent University, Bangladesh (IUB)

#### Abstract:

Recognizing the critical role of both entrepreneurial education (EE) and people management skills in venture success, this study investigates the moderating role of entrepreneurial intention (EI) on the relationship between entrepreneurial education and people managements kills. This study argues that individuals with a stronger desire to become entrepreneursare more likely to actively engage with and internalize the people management skills. Human Capital Theory, the theory of plan behavior (TPB), Behavioral Entrepreneurial Mindset (BEM) model are considered supporting theories in this study, to shed light on EE and skills. A combination of non-probability convenience sampling and purposive sampling approaches was employed to determine the participants for this research study. The sample size of 323 entrepreneurs (participants) was determined to be adequate through both practical and statistical considerations. The proposed conceptual framework was tested using partial least squares-structural equation modeling (PLS-SEM). The outcome confirms a significant and positive association between entrepreneurial education and entrepreneur's management creativity, execution excellence, resource utilization, mobilizing others, focus yet adapt, and social skills while the moderation analysis reveals the links between entrepreneurial education and management creativity, entrepreneurial education and resource utilization, entrepreneurial education and mobilizing others, and entrepreneurial education and social skills are moderated by entrepreneurial intention. As most of the prior works attempted to investigate the technical and cognitive aspects of entrepreneurial education and intention, this study contributes to the literature by revealing the benefits for the entrepreneurs' derived from EI through EE.



# The Role of Al in Workforce Transformation: Implication for HR Adoptability and Ethical Consideration

### S Priyanka

Research Scholar, Commerce, St. Peters Institute of Higher Education and Research, Chennai, India

#### Abstract:

This paper examines the key factors recognized as transformative in the field of human resource management (HRM) and explores their influence on the global adoption of artificial intelligence (AI). While AI holds significant promise for enhancing HRM efficiency, employee engagement, and Decision Making, its implementation presents a range of organizational, technical, and ethical challenges that organizations worldwide must navigate. Change aversion, data security worries, and integration expenses are major roadblocks, but strong digital leadership, company culture, and advancements in NLP and machine learning are key enablers. This paper presents a complex analysis that questions the common perception of AI as only disruptive by delving into the relationship between power dynamics, corporate culture, and technology infrastructures. In this paper, we bring together research from several fields to help scholars and practitioners understand the nuances of AI adoption in HRM, with an emphasis on the importance of inclusive methods and ethical framework.



# Digital Transformation of Indonesian Government Procurement: Identifying Success Factors and Challenges

#### Pramesti Puji Lestari

Economics & Business Faculty, SoE University, Indonesia

#### Akhmad Yunani

Economics & Business Faculty, SoE University, Indonesia

### Putu Nina Madiawati

Economics & Business Faculty, SoE University, Indonesia

#### Abstract:

**Purpose:** The purpose of this study is to identify the factors that influence the success of the digital transformation of government procurement in Indonesia, analyze the challenges faced, and provide recommendations for improvement strategies in implementation to increase efficiency, transparency, and accountability in the public procurement process.

Design/Methodology/Approach: This research uses a qualitative approach with a case study method, which includes descriptive approaches to provide a comprehensive picture, interpretive to understand the experiences of public administrators, and exploratory to explore new phenomena. Informants came from executives in government, such as LKPP, the Ministry of Finance (MoF), and SoE. Data analysis was conducted with NVivo and SOAR, with data triangulation to ensure the validity of the results.

**Findings:** This research identifies key success factors and challenges in implementing digital transformation of government procurement in Indonesia. In addition, it provides continuous improvement strategies and a framework for government digital transformation that can be applied in other government sectors.

Research Limitations/Implications: This research focuses on the strategy development and implementation of digital transformation of government procurement in Ministries and Institutions, with case studies on LKPP, MoF, and SoE as the strategizers and developers. However, it does not address procurement implementation in local governments and other agencies, nor does it explore the perspectives of system users.

Originality/Value: The results of this study provide strategic recommendations for the government to improve efficiency, transparency, and accountability in government procurement processes, and provide a framework to support the implementation of digital transformation in other government sectors.

Keywords: Digital Transformation, Government Procurement, Success Factors, Challenges, Continuous Improvement Strategies

# Kuala Lumpur, Malaysia

# From Game to Gains – Ai Driven Language Process

#### Dr. Balamurugan A

Department of Computer Science and Engineering, KPR Institute of Engineering and Technology, Uthupalayam, Tamil Nadu, India

Department of Computer Science and Engineering, KPR Institute of Engineering and Technology, Uthupalayam, Tamil Nadu, India

#### Jeevitha U

Department of Computer Science and Engineering, KPR Institute of Engineering and Technology, Uthupalayam, Tamil Nadu, India

#### Nandhini K

Department of Computer Science and Engineering, KPR Institute of Engineering and Technology, Uthupalayam, Tamil Nadu, India

### Abstract:

To improve user engagement and language competency, the suggested language learning platform makes use of gamification, cloud-based audio streaming, and Al-driven interactive exercises. Built with React. is for the web and React Native or Flutter for mobile, it provides features like progress monitoring, language selection, and pronunciation help from artificial intelligence. Developed using Node.js and a PostgreSQL/MySQL database, the backend controls gamification logic, user authentication, and content delivery. An admin dashboard facilitates effective content management. Cloud storage solutions provide low latency and flawless audio transmission. While a safe payment channel allows paid subscriptions for continuous learning access, gamification features like leaderboards, points, and hearts keep users engaged.

Keywords: Ai-Powered Language Learning, Gamification, User Engagement, Scalability, Frontend Development



# Mortality Risk Prediction Of Infants At Birth using Fetal Data

#### Hema Sri Naga Sita Kakumanu

Dept. of CSE, VFSTR Deemed to be University, Guntur, India

#### Laxmi Prathyusha Nelluru

Dept. of CSE, VFSTR Deemed to be University, Guntur, India

#### Kavya Ketha

Dept. of CSE, VFSTR Deemed to be University, Guntur, India

#### Brahma Naidu Nalluri

Dept. of CSE, VFSTR Deemed to be University, Guntur, India

### Abstract:

This study prescribes a prediction model to forecast the risk of pregnancy complications from fetal health data gathered with cardiotocography (CTG) during pregnancy. The core aim here is to determine whether a baby would be healthy at birth or might develop some medical complications, so that medical professionals can take corresponding measures in advance. Using early-stage medical markers, the model makes early diagnosis without causing undue alarm to potential parents. Various machine learning algorithms were attempted to design the prediction system, and these included Decision Tree, Random Forest, Support Vector Machine (SVM), k-Nearest Neighbors (KNN), Logistic Regression, and Extra Trees Classifier, and Decision Tree was employed as the baseline model due to it being simple to interpret and understand. In order to enhance the performance, ensemble learning techniques were employed by voting between the classifiers, i.e., Extra Trees and SVM, Random Forest and Logistic Regression, SVM and KNN, Extra Trees and KNN, and Random Forest and SVM, so that the strengths of the individual models can be utilized and their weaknesses can be avoided. Among them, the ensemble model Decision Tree-Random Forest was the one to provide the highest classification accuracy at 94.04%, with evidence of how strong ensemble strategies are in creating more accurate and stable predictive models. This illustrates the tremendous impact made by advanced machine learning techniques for medicine, particularly prenatal care, by virtue of being able to identify and facilitate the early detection making possible timely evidence-based medical decision-making that can result in improved outcomes for babies as well as mothers.

Keywords: Prenatal Diagnosis, Mortality Risk Prediction, Ensemble Learning



63

# Innovative Infrastructure Inspection System: Development and Pilot Deployment in Baguio City

# Hansi Dinumla

University of the Cordilleras, Baguio City, Philippines

#### Abstract:

The Innovative Infrastructure Inspection System will be designed in alignment with the local infrastructure audit tools and guidelines rolled out by the Department of Interior and Local Government (DILG) for Local Government Units (LGUs) to use. A key component of the infrastructure audit process involves data collection using the LGU Infrastructure Audit Form for Buildings (LIAF-1), which serves as the primary reference for system development. The system consists of a mobile application for field data collection and a web-based platform for streamlined data processing and management. The mobile app enables real-time collection of inspection details, hazard vulnerability data, and structural assessment information, which are automatically analyzed to generate assessment reports and insights. The gathered data is then transmitted to the web application for further processing, visualization, and integration, facilitating a more efficient, data-driven approach to infrastructure inspection and management.



# Opinion Mining from Traveler Comment using Natural Language Processing Machine Learning Techniques

#### Dr. M. Babu

Rajalakshmi Engineering College, Rajalakshmi Nagar, Thandalam, Chennai, Tamilnadu, India

#### Keerthiga E

Rajalakshmi Engineering College, Rajalakshmi Nagar, Thandalam, Chennai, Tamilnadu, India

#### Lakshaya R

Rajalakshmi Engineering College, Rajalakshmi Nagar, Thandalam, Chennai, Tamilnadu, India

#### Abstract:

This project aims to create a web based tourism sentiment analysis app. The system integrates various Natural Language Processing (NLP) techniques including tokenization and part-of-speech, with machine learning algorithms such as Support Vector Machine (SVM), Naive Bayes and Long Short-Term Memory (LSTM) networks to classify user comments on hotels, restaurants, travel agents and attractions into positive comment or negative comment. The way the system classifies the comments in positive, negative or neutral way helps lay down an insight for businesses to improve upon their service quality. The application also uses a Django framework for interaction between administrators and users in real time. The administrators can update the place with a tourism related content and users can give their feedback about it, which after be analysed by machine learning models. We propose a novel system to address the common challenges of sentiment analysis, including complex sentiments (e.g., sarcasm), accuracy, large dataset scalability and context-specific issues. In conclusion, this serves project is to enable tourism businesses with data to build a better customer experience.

Keywords: Sentiment Analysis, Opinion Mining, Machine Learning, Natural Language Processing (NLP),
Support Vector Machine (SVM), and Naive Bayes, Long Short-Term Memory (LSTM), Tokenization,
Web Application, Traveler Comments, Tourism Industry, Django Framework, Customer Feedback,
Text Classification and finally Data-Driven Insights



# Design of a Web Based Academic Counselling Information System in University: A Case Study of Jakarta State University, Indonesia

### Zarina Akbar\*

Faculty of Psychology, Jakarta State University, Indonesia

#### Mauna

Faculty of Psychology, Jakarta State University, Indonesia

### Ernita Zakiah

Faculty of Psychology, Jakarta State University, Indonesia

#### Maratini Shaliha Aisyawati

Faculty of Psychology, Jakarta State University, Indonesia

#### Abstract:

This research presents the design of web-based academic counselling information system. The research aims to reveal a design framework for a web-based academic counselling information system integrated with universities, lecturers, students to support academic counselling processes. In the implementation of academic counselling, lecturers and students must work together to create quality guidance. This research is structured as a design-based research approach. This research presents the results of the first cycle of design-based research. The research follows a five step process: (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation. A pilot study involved three psychologist and two counsellors as reviewers in Jakarta State University Indonesia. The system examined with ten students during implementation. Feedback from reviewers guided improvements. Overall the web is receptive, easily access when used, and get information directly. Moreover, the web can still be developed such as adding notification features, providing popups with further information as a guide for users, connecting to users email or whatsapp, and being synchronized with the counselor's activity schedule. With this system is expected also to become a web-based academic counselling in order to make information system faculty better in particular and all faculties of university all over Indonesia.

Keywords: Web-based, Academic Counselling, Higher Education



# Environmental, Social, and Governance Risk Research Trend in Scholarly Publications: A Bibliometric Perspective

#### Josephine Wuri

Department of Economics, Faculty of Economics, Sanata Dharma University, Yogyakarta, Indonesia

#### Laurentius Bambang Harnoto

Department of Economics, Faculty of Economics, Sanata Dharma University, Yogyakarta, Indonesia

### Media Putri Baroto

Department of Economics, Faculty of Economics, Sanata Dharma University, Yogyakarta, Indonesia

#### Abstract:

Environmental, Social, and Governance (ESG) risks have become a significant focus of academic research, especially in economics and sustainability. This study analyzes and maps scientific publications on ESG risks from a bibliometric perspective to identify research trends, productive contributors, collaboration networks, and current research focus areas. This study uses the Scopus database for 2020–2024 and utilizes the VOSviewer visualization tool. The findings indicate a substantial increase in publications regarding ESG risk in recent years. The contributions of researchers worldwide represent interests that cross geographical boundaries and provide an overview of global challenges. Mapping ESG risk using network visualization results in two groups of issues. The red cluster primarily focuses on regulation, risk management, and compliance. The green cluster emphasizes the practical implementation and influence of ESG on the Company's performance. These findings offer enhanced insight into research trends and gaps concerning environmental and social risks and strategies to achieve sustainable ESG.



# Exploring Teaching Practices in 5G XR-based Distance Co-learning: A Case Study on Instructional Implementation in Taiwanese Elementary Schools

#### Yu Yun, Pan

Doctoral Program in Design, College of Design. National Taipei University of Technology. Taipei, Taiwan & Department of Innovative Living Design, Overseas Chinese University, Taiwan

#### Abstract:

The emergence of 5G communication technology has enabled the integration of extended reality (XR)—including AR, VR, and MR—into educational settings, creating new opportunities for immersive, cross-campus learning. This study investigates teaching practices and instructional challenges faced by a team of elementary school educators in Taiwan through the implementation of a 5G XR co-learning lesson focused on disaster preparedness. Drawing from direct teaching participation and qualitative data—including classroom observations, video recordings, and semi-structured interviews—the research explores how immersive technologies influence teaching roles and classroom dynamics in distance education.

The findings highlight the importance of teacher adaptability, inter-school collaboration, and real-time classroom responsiveness in delivering effective XR-based lessons. This study proposes a practical framework for implementing digital co-learning under technological and logistical constraints, contributing scalable insights for instructional designers, policy-makers, and practitioners. It also underscores the potential of immersive technologies not only to enhance student motivation but to foster meaningful engagement with real-world problem-solving.

Keywords: 5G XR Co-learning, Innovative Pedagogy, Teaching Practice, Distance Learning



# Factors Affecting Parents' Decisions on Treatments and the Perceived Impact on Children with Autism Spectrum Disorder (ASD)

#### Karen Marie P. Garcia

National University-Philippines

### Zyrene Anne A. Pabrualinan

National University-Philippines

### Ramon Gerald A. Santillana

National University-Philippines

#### Joseph J. Cando

National University-Philippines

#### Veronica Clarisse S. Mendoza

National University-Philippines

### Jefferson Y. Jimenez

National University-Philippines

### Dan Andrei N. Bagao

National University-Philippines

#### Abstract:

This study used a Mixed Method design. The quantitative study determined the extent of influence of the factors affecting parents' decisions concerning treatments, while the qualitative part describes the impact of the treatments on the children with ASD as perceived by the parents. The study was conducted online covering the different areas of the country. This was due to the government-implemented enhanced community quarantine because of the Covid-19 health crisis. One hundred two (102) respondents answered the online survey questionnaire consisting of 55 items using a four-point scale. Five (5) selected parents were interviewed for the qualitative part. Based on the demographic profile of the 102 participants,64.71% are 25 to 40 years old, 70.59% are married, 80.39% are college graduates, 68.63% reported they have access to support groups, such as Autism Society of the Philippines and other Facebook groups, and, close to 50% are either poor or in the lower middle income bracket. The credibility of the service provider is the most influential factor in the decisionmaking of the parents, followed by availability of treatment information, then by the cost of treatment and the least is the accessibility of the service provider. The positive experiences shared by the parents are (a) improvements in fine motor skills and gross motor skills, (b) improvements in language and communication and (c) improvement in social behavior and learning skills. The negative experiences shared include (a) ineffective programs in speech and language treatment, (b) slow progress in learning motor skills because of the slow pace of therapy, (c) limited learning from mixed therapy, and (d) encountering a wrong role model for the child in school. Based on the findings, recommendations were given, among which is for future research to explore further the outcomes of different treatment programs for children with autism.



# OpenAlPerovskite: A Visualization Dashboard of Solar Performance Trends of 2D Lead-Halide Perovskite

### Nurul Izzah Hayati Mohd Noor

Faculty of Data Science and Computing, Universiti Malaysia Kelantan, Kota Bharu, Kelantan, Malaysia

#### Nur Aleya Nazifa Zulkifle

Faculty of Data Science and Computing, Universiti Malaysia Kelantan, Kota Bharu, Kelantan, Malaysia

#### Wan Nur Izzati Wan Abd Aziz

Faculty of Data Science and Computing, Universiti Malaysia Kelantan, Kota Bharu, Kelantan, Malaysia

#### Noorhafizah Muhammad

Faculty of Data Science and Computing, Universiti Malaysia Kelantan, Kota Bharu, Kelantan, Malaysia

#### Hasyiya Karimah Adli\*

Faculty of Data Science and Computing, Universiti Malaysia Kelantan, Kota Bharu, Kelantan, Malaysia

#### Abstract:

Perovskite materials are promising semiconductors for solar cells due to their excellent optoelectronic properties, tunable band gaps, and low-cost fabrication. While 3D perovskites achieve high power conversion efficiencies (PCEs), they are unstable under humidity. In contrast, 2D perovskites offer better moisture resistance but involve trade-offs between stability and performance. To address the lack of an interactive tool that links these factors, we developed OpenAlPerovskite, a machine learning-powered dashboard built using Power Bl. It integrates experimental data on material types, fabrication conditions, device structures, and PCEs, allowing users to explore both reported and predicted trends. Key features include dynamic visualizations of maximum/minimum PCE, material classification, and multi-parameter filtering. The highest 2D perovskite efficiency recorded in the dataset was 20.62% (2018) under 25°C and 40% humidity using a TiO2/BAFAPbBrl/Spiro-MeOTAD/Au device with DMF-DMSO solvents. The dashboard highlights how factors like hybrid solvents, advanced hole transport layers, and multi-cation designs contribute to higher performance and stability. OpenAlPerovskite offers a new way to connect experimental data with Al insights and will be expanded with more predictive models in future work.



# The Evolution of Yiwu's Small Commodity Market: Cultural Entrepreneurship, Digitalization, and Internationalization toward Southeast Asia

#### Jin Ling

UCSI University, Kuala Lumpur, Malaysia & YiWu Industrial & Commercial College, Jinhua, China

#### Hwee Ling Siek

UCSI University, Kuala Lumpur, Malaysia & YiWu Industrial & Commercial College, Jinhua, China

#### Xue Chuan

UCSI University, Kuala Lumpur, Malaysia & YiWu Industrial & Commercial College, Jinhua, China

#### Abstract:

Yiwu, a county-level city in Zhejiang Province, is one of China's most economically developed regions. In 2005, the United Nations, World Bank, and Morgan Stanley recognized Yiwu as hosting "the world's largest small commodities market". The people of Yiwu are known for their spirit of innovation and exploration, enabling the city to keep pace with the times, pursue progress with determination, and establish a globally renowned small commodity market. The integrity and inclusiveness reflect the Yiwu people's tolerance and friendliness. Cultural entrepreneurship, digital transformation, and internationalization strategies directed toward Southeast Asia have become vital driving forces for the sustainable development of Yiwu's regional economy, with cultural and design innovation playing a pivotal role. This study, based on interviews with the presidents of Yiwu Business Industry Associations, local entrepreneurs, and cultural creators, examines how Yiwu integrates cultural creative design, digital technology, and new marketing models for cultural innovation and economic transformation, particularly considering recent developments such as the establishment of the Yiwu Selection showroom in Malaysia as the Yiwu International Trade City brand goes overseas. Findings show that Yiwu leverages cultural and creative products to enhance local cultural value, undergoes digital structural transformation, and adopts fan economy models to boost market engagement, especially in Southeast Asian markets. These transformations not only support Yiwu's internationalization efforts but also demonstrate how local culture, design, and innovation can collaboratively drive global market expansion, offering a reference model for other regions pursuing sustainable economic development.



# Unveiling Employee Perspectives on Returning to The Workplace: A Study on The IT Industry

### Priya. K

Research Scholar & Assistant Professor, Department of Management Studies, VTU Belgavi, India & GSSS Institute of Engineering and Technology for Women Mysuru, India

#### Dr. TP Renuka Murthy

Professor of Management, Dept of Management Studies, CPGS Visvesvaraya Technological University, Mysore, Karnataka, India

### Dr. Manjunatha M.K

Assistant Professor of Management, Dept of Management Studies, CPGS Visvesvaraya Technological University, Mysore, Karnataka, India

#### Dr. Shashidhar S Mahantshetti

Associate Professor, GSSS Institute of Engineering and Technology for Women Mysuru, India

### Shivabeerappa. M

Assistant Professor, MMK & SDM Mahila Maha Vidyalaya, Mysore, India

#### Abstract:

Globally, the COVID-19 pandemic has drastically changed work conditions, IT sector has seen a sharp increase in remote employment. Recognising employee viewpoints is essential as businesses return to office-based work. The attitudes, difficulties, and preferences of employees with regard to going back to work are examined in this study. A standardised questionnaire was used to survey a sample of 200 IT workers. SPSS was used to analyse the data, including statistical procedures such factor analysis, regression, ANOVA, and correlation. The results indicate that employee inclination to return is highly influenced by flexibility, work-life balance, and commuter concerns. To increase productivity and job happiness, organisations must create hybrid models that accommodate the various needs of their workforce.



# Assessing The Phillips Curve in China: An Empirical Study of Inflation and Unemployment

### Xijun Zhao

School of Mathematical Sciences, Universiti Sains Malaysia, Minden, Malaysia

#### Mei Tuan Teng

School of Mathematical Sciences, Universiti Sains Malaysia, Minden, Malaysia

### Chia Yean Lim

School of Computer Sciences, Universiti Sains Malaysia, Minden, Malaysia

#### Abstract:

China's inflation rate (IR) has generally remained moderately fluctuating, while the unemployment rate (UR) has shown a phased upward trend under economic transformation. Studying these two fields is conducive to the central bank's regulation and control of fiscal and monetary policies. Given China's distinct economic structure and government-controlled labor market, it remains unclear whether the classical Phillips Curve (PC) or the New Keynesian Phillips Curve (NKPC) holds in this context. The research aims to test the theoretical feasibility of applying PC models within China's economy and provide empirical insights into inflation-unemployment dynamics. To capture both short- and long-term dynamics, annual data from 1978 to 2021 was utilized and applied to the linear regression model and autoregressive distributed lag (ADL) model to test the performance of the classical PC and the NKPC in China respectively. The findings of the Johansen cointegration test indicate the independent variables—UR, gross domestic product index (GDPI), exchange rate (ER), and national savings rate (NSR)—demonstrate a long-term influence on the dependent variable IR, which supports the applicability of the PC in this context. From an academic perspective, the study enriches the literature by extending the PC framework to a developing, transitionary economy, offering a methodological reference for future research.