



**3<sup>rd</sup> International Conference on  
Multidisciplinary Innovation in  
Academic Research**

**ICMIAR-2021**

**25<sup>th</sup> - 26<sup>th</sup> November, 2021**

**Chennai, India**

**Virtual Conference**



**Organized By**

**Institute For Engineering Research and Publication (IFERP)**



3<sup>rd</sup> International Conference on  
Multidisciplinary Innovation in  
Academic Research

(ICMIAR -2021)

**Chennai, India**

**25<sup>th</sup> – 26<sup>th</sup> November, 2021**

*Organized By*

**Institute For Engineering Research and Publication (IFERP)**

[www.iferp.in](http://www.iferp.in)

Publisher: IFERP Explore

©Copyright 2021, IFERP-International Conference

No part of this book can be reproduced in any form or by any means without prior written  
Permission of the publisher.

This edition can be exported from India only by publisher

IFERP-Explore

## **Editorial:**

We cordially invite you to attend the **3<sup>rd</sup> International Conference on Multidisciplinary Innovation in Academic Research (Virtual) (ICMIAR-21)** on **25<sup>th</sup>–26<sup>th</sup> November, 2021**. The main objective of **ICMIAR-21** is to provide a platform for researchers, students, academicians as well as industrial professionals from all over the world to present their research results and development activities in relevant fields of Recent Challenges in Science and Technology. This conference will provide opportunities for the delegates to exchange new ideas and experience face to face, to establish business or research relationship and to find global partners for future collaboration.

These proceedings collect the up-to-date, comprehensive and worldwide state-of-art knowledge on cutting edge development of academia as well as industries. All accepted papers were subjected to strict peer-reviewing by a panel of expert referees. The papers have been selected for these proceedings because of their quality and the relevance to the conference. We hope these proceedings will not only provide the readers a broad overview of the latest research results but also will provide the readers a valuable summary and reference in these fields.

The conference is supported by many universities, research institutes and colleges. Many professors played an important role in the successful holding of the conference, so we would like to take this opportunity to express our sincere gratitude and highest respects to them. They have worked very hard in reviewing papers and making valuable suggestions for the authors to improve their work. We also would like to express our gratitude to the external reviewers, for providing extra help in their view process, and to the authors for contributing their research result to the conference.

Since September 2021, the Organizing Committees have received more than 90 manuscript papers, and the papers cover all the aspects in Science and Technology. Finally, after review, about 38 papers were included to the proceedings of **ICMIAR-21**.

We would like to extend our appreciation to all participants in the conference for their great contribution to the success of **ICMIAR-21**. We would like to thank the keynote and individual speakers and all participating authors for their hard work and time. We also sincerely appreciate the work by the technical program committee and all reviewers, whose contributions made this conference possible. We would like to extend our thanks to all the referees for their constructive comments on all papers; especially, we would like to thank to organizing committee for their hard work.





## Acknowledgement

IFERP is hosting the **3<sup>rd</sup> International Conference on Multidisciplinary Innovation in Academic Research- 2021** this year in the month of November. The main objective of **Multidisciplinary Innovation in Academic Research** 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 session will 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 be known as a thoughtful leader.

I express my gratitude to all my colleagues, staffs, professors, reviewers and members of organizing committee for their hearty and dedicated support to make this conference successful.



**Rudra Bhanu Satpathy**

Chief Executive Officer

Institute for Engineering Research and Publication (IFERP)



044-42918383



Email: [info@iferp.in](mailto:info@iferp.in)  
[www.iferp.in](http://www.iferp.in)



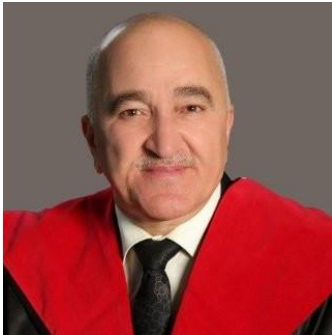
Girija Towers, Arumbakkam, Chennai - 600106

**3<sup>rd</sup> International Conference on  
Multidisciplinary Innovation in  
Academic Research**

**(ICMIAR -21)**

**25<sup>th</sup> – 26<sup>th</sup> November, 2021**

**Keynote Speakers**



## **Dr Rami Al-Hadeethi**

Vice President for International Relations,  
University of Victoria,  
Unit B, Suite 545, 63-66 Hatton Garden,  
EC1N 8LE,  
London, United Kingdom.  
Email: rami@uovl.uk

### **Message**

The keynote is titled “Strategies of Students Assessment for Blended Learning”,

This keynote will highlight the importance of e-Learning which prompted educational institutions to think seriously about incorporating it into the educational process. There are many reasons such as spread of students across the globe, time constraints, difficulties in physical attendance beside uncontrolled disasters such as the recent COVID-19 pandemic.

The keynote will present how student assessment has changed in the new millennium as new technologies are evolving daily to assist teachers with this task. Moreover, will highlight the biggest problem once we move into the online context is the comprehensive import of the face-to-face version of the course to the online medium.

The keynote will clarify that the following points:

- The online learning offers educators an opportunity to rethink their approach to assessment.
- There are many strategies you can use to evaluate students mindfully based on learning needs and objectives.
- The end goal of better assessment is better learning.

The keynote will end with some keys to the future of e-learning and concluding that using the assessment tool as a learning tool, rather than a measurement exercise, can enhance the learning experience.



**Dr. Marc Moser**

Professor and International Visiting Faculty  
Saas-Fee, Valais, Switzerland.



**Dr. Kiran Nair**

Director  
MBA Program & Associate Professor of Management  
Abu Dhabi School of Management (ADSM), UAE



**Dr. Deepak Tandon**

Professor - ( Finance & Accounting Area)  
Programme Director-Centre For advanced banking  
International Management Institute (IMI)  
Tara Crescent, New Delhi



**Mr. Gary Cokins**

Founder and CEO  
Analytics-Based Performance Management LLC, The United States



**ICMIAR -2021**

**3<sup>rd</sup> International Conference on  
Multidisciplinary Innovation in Academic  
Research**

25<sup>th</sup> - 26<sup>th</sup> November, 2021

**Organizing Committee**

**National Advisory Committee Member**

**DR. NITEEN L. BHIRUD**

Dean, Department Of Mechanical Engineering  
*Sandip Institute of Engineering and Management*  
*Nashik, Maharashtra, India*

**DR. PARUL GUPTA**

Director And Professor, Department Of Mechanical Engineering  
*R.V. Institute of Technology*  
*Bijnor, Uttar Pradesh, India*

**DR. S. NEDUNCHELIYAN**

Dean, School Of Computing  
*Bharath Institute of Higher Education and Research*  
*Selaiyur, Tamil Nadu, India*

**DR. V. SAMPATH KUMAR**

Director,  
*Christ College of Engineering*  
*Irinjalakuda , Kerala, India*

**GUFRAH AHMAD ANSARI**

Professor And Director, Centre For Smart Campus, Department Of Computer Applications  
*B.S. Abdur Rahman Crescent Institute of Science and Technology*  
*Chennai, Tamil Nadu, India*

**PROF. SUNIL KR. PANDEY**

Professor & Director , Department Of Information Technology  
*Institute of Technology & Science*  
*Ghaziabad, Uttar Pradesh, India*

**DATTATRAY SAMBHAJI WAGHOLE**

Treasurer,  
*IEEE Education Society*  
*Pune, Maharashtra, India*

**DR CHIRRA KESAVA REDDY**

Professor & Principal,  
*Universal College of Engineering & Technology*  
*Guntur, Andhra Pradesh, India*

**DR.J.S.GNANASEKARAN**

Principal,  
*R.V.S. College of Engineering*  
*Dindigul, Tamil Nadu, India*

**DR.R.VISWANATHAN**

Professor & Vice Principal, Department Of Mechanical Engineering  
*AVS Engineering College*  
*Salem, Tamil Nadu, India*

**DR.VIVEK .G. PARHATE**

Vice Principal And Associate Professor, Department Of Mechanical Engineering  
*SURYODAYA COLLEGE OF ENGINEERING AND TECHNOLOGY*  
*Nagpur, Maharashtra, India*

**D.K. CHATURVEDI**

Professor & Head, Department Of Footwear Technology  
*Dayalbagh Educational Institute*  
*Agra, Uttar Pradesh, India*

**Dr S.UMARANI**

Professor & Head, Department Of Computer Science And Engineering.  
*SRM Institute of Science and Technology*  
*Chennai, Tamil Nadu, India*

**DR. AMIT SINGHAL**

Professor & Head, CSE (IOT)  
*Raj Kumar Goel Institute of Technology*  
*Ghaziabad, Uttar Pradesh, India*



**DR. KALYANI SRINIVAS C**

Professor & Head, Department Of Master Of Business Administration  
*PES Modern College of Engineering*  
*Pune, Maharashtra, India*

**Dr. NASEEB KHAN**

Professor & Head, Department Of Mechanical Engineering  
*Shadan College of Engineering*  
*Hyderabad, Telangana, India*

**DR. SANJAY SINGH THAKUR**

Professor & Head, Department Of Electronics And Telecommunication Engineering  
*Vidyalankar Institute of Technology*  
*Wadala, Maharashtra, India*

**DR. THA. THAYUMANAVAN**

Professor & Head, Department Of Biotechnology  
*Kalaignar karunanidhi Institute of Technology*  
*Coimbatore, Tamil Nadu, India*

**DR.R.VASUKI**

Professor & Head, Department Of Biomedical Engineering  
*Bharath Institute of Science and Technology*  
*Selaiyur, Tamil Nadu, India*

**DR.T. VARUN KUMAR**

Professor & Head, Department Of Mechanical Engineering  
*P.A. College of Engineering and Technology*  
*Pollachi, Tamil Nadu, India*

**DR.T.PRAKASH**

Professor & Head, Department Of Mechanical Engineering  
*SNS College of Technology*  
*Coimbatore, Tamil Nadu, India*

**JAGADEESH H S**

Professor & Head, Department Of Electronics And Communication Engineering  
*Acharya Patashala College of Engineering*  
*Bangalore, Karnataka, India*

**Dr.P.Selvaraj**

Professor, Department Of Electrical And Electronics Engineering  
*Sri Venkateswara Engineering college*  
*Tirupati, Andhra Pradesh, India*

**DR J.VISWANATH**

Professor, Department Of Mathematics

*Vel Tech rangarajan dr. sagunthala R&D Institute of Science and Technology  
Chennai, Tamil Nadu, India*

**DR P BRIGHTSON**

Professor, Department Of Civil Engineering

*Rajadhani Institute of Engineering and Technology  
Thiruvananthapuram, Kerala, India*

**DR. A. MUTHIAH**

Professor, Department Of Mechanical Engineering

*P.S.R Engineering College  
Sivakasi, Tamil Nadu, India*

**DR. BHUSHAN P SAOJI**

Professor, Department Of Instrumentation

*Bharati Vidyapeeth College of Engineering  
Navi Mumbai, India*

**Dr. Girija Jagannath**

Professor, Department Of Computer Science And Engineering.

*Bangalore Institute of Technology  
Bangalore, Karnataka, India*

**DR. HAIDER YASMEEN**

Professor, Department Of Management Studies

*BSA Crescent Institute of Science and Technology  
Chennai, Tamil Nadu, India*

**DR. M. MAHABOOB BASHA**

Professor, Department Of Electronics And Communication Engineering

*Sreenidhi Institute of Science and Technology  
Hyderabad, Telangana, India*

**DR. P.DEVABALAN**

Professor, Department Of Computer Science And Engineering.

*BVC Engineering College  
Odalarevu, Andhra Pradesh, India*

**DR. REHAN AHMAD KHAN**

Professor, Department Of Civil Engineering

*Aligarh Muslim University  
Aligarh, Uttar Pradesh, India*

**DR. RITESH RASTOGI**

Head, Department Of Master Of Computer Applications  
*NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY*  
*Greater Noida, Uttar Pradesh, India*

**DR. SHRI KANT**

Professor, Department Of Computer Science And Engineering.  
*Sharda University*  
*Greater Noida, Uttar Pradesh, India*

**DR. SUDALAI MUTHU T**

Professor, Department Of Computer Science And Engineering.  
*Hindustan Institute of Technology and Science*  
*Chennai, Tamil Nadu, India*

**DR. T.S.KARTHIK**

Professor, Department Of Electronics And Communication Engineering  
*Aditya College of Engineering and Technology*  
*Surampalem, Andhra Pradesh, India*

**DR.ANSHUMAN SHARMA**

Professor, Department Of Commerce  
*H.R. Institute Of Technology*  
*Ghaziabad, Uttar Pradesh, India*

**DR.C.CHRISTOBER ASIR RAJAN**

Professor, Department Of Electrical And Electronics Engineering  
*Puducherry Technological University*  
*Puducherry, India*

**DR.ISHRAT.M.M**

Professor, Department Of Mechanical Engineering  
*Muffakham Jah College of Engineering and Technology*  
*Hyderabad, Telangana, India*

**DR.J.JEBA RAJ**

Professor, Department Of Mathematics  
*Vivekanandha Educational Institutions*  
*Trichengodu, Tamil Nadu, India*

**DR.KATTA SUBBA RAO**

Professor, Department Of Computer Science And Engineering  
*B V Raju Institute of Technology*  
*Narsapur, Telangana, India*

**DR.M.BINA CELINE DORATHY**

Professor, Department Of Commerce And Management Studies.  
*Jain University*  
*Bangalore, Karnataka, India*

**DR.M.KAVITHA**

Professor, Department Of Computer Science And Engineering.  
*Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology*  
*Chennai, Tamil Nadu, India*

**DR.R.BALAJI**

Professor, Department Of Management Studies  
*Saveetha Engineering College*  
*Chennai, Tamil Nadu, India*

**DR.R.GOPALAKRISHNAN**

Professor, Department Of Civil Engineering  
*SRM Easwari Engineering College*  
*Chennai, Tamil Nadu, India*

**DR.RAMESHWAR KAWITKAR**

Professor, Department Of Electronics And Telecommunication Engineering  
*Sinhgad College of Engineering*  
*Pune, Maharashtra, India*

**DR.S.R.M.KRISHNA**

Professor, Department Of Computer Science And Engineering  
*CVR College of Engineering & Technology*  
*Ibrahimpattanam, Telangana, India*

**DR.S.SRILALITHA**

Professor, Department Of Chemistry  
*ACE Engineering College*  
*Hyderabad, Telangana, India*

**DR.VIJAYALAKSHMI KAKULAPATI**

Professor, Department Of Computer Science And Engineering  
*Sreenidhi Institute Of Science And Technology*  
*Hyderabad, Telangana, India*

**MADHUSUDHANAN**

Professor, Department Of Biotechnology  
*Anand Institute of Higher Technology*  
*Chennai, Tamil Nadu, India*

**PROF. DR. S. GANAPATHY VENKATASUBRAMANIAN**  
Professor, Department Of Environmental Law And Management  
*ANNA UNIVERSITY*  
*Chennai, Tamil Nadu, India*

**DR. J. SENTHIL KUMAR**  
Associate Professor & Head, Department Of Biotechnology  
*PSG College of Arts and Science*  
*Coimbatore, Tamil Nadu, India*

**Dr. KANNAN K**  
Adjunct Professor, Department Of Information And Computer Technology  
*Winway College of Business and Technology*  
*Croydon, CR0 2LX, London, United Kingdom*

**DR. KAVITHA BALAMURUGAN**  
Associate Professor & Head, Department Of Electronics And Communication Engineering  
*KCG College of Technology*  
*Chennai, Tamil Nadu, India*

**DR. NARENDRA KUMAR**  
Associate Professor & Head, Department Of Biological Sciences And Biotechnology  
*Institute of Advanced Research*  
*Gandhinagar, Gujarat, India*

**DR. SACHIN BHAT**  
Associate Professor & Head, Department Of Electronics And Communication Engineering  
*Shri Madhwa Vadiraja Institute of Technology and Management*  
*Udupi, Karnataka, India*

**DR. SHAILESH M KEWATKAR**  
Associate Professor & Head, Department Of Pharmacognosy  
*Rajarshi Shahu College of Pharmacy*  
*Buldana, Maharashtra, India*

**DR. SHEEBA PS**  
Associate Professor & Head, Department Of Electronics Engineering  
*Lokmanya Tilak College of Engineering*  
*Navi Mumbai, Maharashtra, India*

**DR. SHIV KUMAR**  
Associate Professor & Head, Department Of Civil Engineering  
*Jims Engineering Management Technical Campus*  
*Greater Noida, Uttar Pradesh, India*

**DR.BHADRAPPA HARALAYYA**

Associate Professor & Head, Department Of Management And Business Administration  
*Lingaraj Appa Engineering College*  
*Bidar, India*

**HEMANT P. KASTURIWALE**

Associate Professor & Head, Department Of Electrical And Electronics Engineering  
*Thakur College of Engineering and Technology*  
*Kandivali, Maharashtra, India*

**PROF V.SELVAN**

Head Of Department, Department Of Civil Engineering  
*Kumaraguru College of Technology*  
*Coimbatore, Tamil Nadu, India*

**SHASHI KANT GUPTA**

CEO & Founder,  
*Chinmay Research Education and Publication Pvt. Ltd.,*  
*Lucknow, Uttar Pradesh, India*

**Y. DAVID SOLOMON RAJU**

Associate Professor & Head, Department Of Electronics And Communication Engineering  
*Holy Mary Institute of Technology & Science*  
*Hyderabad, Telangana, India*

**Core Committee**

**Dr. G. Yogapriya**

Associate Professor, School Of Environment Architecture And Interior Design  
*SRMIST, Ramapuram campus*  
*Chennai, Tamil Nadu, India*

**AJAY KUMAR KAVITI**

Associate Professor, Department Of Mechanical Engineering  
*Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology*  
*Secunderabad, Telangana, India*

**BASHEER V.P**

Associate Professor, Department Of Electronics And Communication Engineering  
*Al-Ameen Engineering College*  
*Shoranur, Kerala, India*

**Dr. Abhay Shukla**

Associate Professor, Department Of Computer Science Engineering  
*Axis Institute of Technology and Management*  
*Kanpur, Uttar Pradesh, India*

**DR. BABASAHEB R JADHAV**

Associate Professor, Department Of Financial Management  
*Global Business School and Research Centre*  
*Pune, Maharashtra, India*

**DR. D. CHINNI KRISHNA**

Associate Professor, Department Of Physics  
*Government City College*  
*Hyderabad, Telangana, India*

**DR. D.KAVITHA**

Associate Professor, Department Of Computer Science And Applications  
*St. Peter's Institute of Higher Education and Research*  
*Chennai, Tamil Nadu, India*

**DR. DANISH ATHER**

Associate Professor, Department Of Computer Science And Engineering  
*Sharda University*  
*Greater Noida, Uttar Pradesh, India*

**DR. HARI KRISHNA S**

Associate Professor, Department Of Chemistry  
*Sri Sairam College of Engineering*  
*Bangalore, Karnataka, India*

**DR. HIMANI MITTAL**

Associate Professor, Department Of Electronics And Communication Engineering  
*Raj Kumar Goel Institute Of Technology*  
*Ghaziabad, Uttar Pradesh, India*

**DR. JAYDEEP B. PATIL**

Associate Professor, Department Of Information Technology  
*AISSMS's Institute of Information Technology*  
*Pune, Maharashtra, India*

**DR. KEERTI KUMAR KORLAPATI**

Associate Professor, Department Of Electronics And Communication Engineering  
*Vaageswari College of Engineering*  
*Karimnagar, Telangana, India*

**DR. L.K.TOKE**

Associate Professor, Department Of Mechanical Engineering  
*Sandip Institute of Engineering & Management*  
*Nashik, Maharashtra, India*

**DR. M. ANANTHI**

Associate Professor, Department Of Computer Science And Business Systems  
*Sri Sairam Engineering College*  
*Chennai, Tamil Nadu, India*

**DR. M. MURALI**

Associate Professor, Department Of Electrical And Electronics Engineering  
*KSRM College of Engineering*  
*Kadapa, Andha Pradesh, India*

**DR. M. VANITHA**

Associate Professor, Department Of Electronics And Communication Engineering  
*Saveetha Engineering College*  
*Chennai, Tamil Nadu, India*

**DR. M. VINOD KUMAR**

Associate Professor, Department Of Civil Engineering  
*Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology*  
*Chennai, Tamil Nadu, India*

**DR. MOHAMMAD MUSTHAKAHAMMAD**

Associate Professor, Department Of Mechanical Engineering  
*Deccan College of Engineering and Technology*  
*Hyderabad, Telangana, India*

**Dr. Pramod**

Associate Professor, Department Of Information Science & Engineering  
*P.E.S. Institute of Technology and Management*  
*Shimoga, Karnataka, India*

**DR. RAJKUMAR. E**

Associate Professor, Department Of Design And Automation  
*VIT University*  
*Vellore, Tamil Nadu, India*

**DR. RASHMI MISHRA**

Associate Professor, Department Of Mathematics  
*G L BAJAJ INSTITUTE OF TECHNOLOGY & MANAGEMENT*  
*Greater Noida, Uttar Pradesh, India*



**Dr. S PRAMOD KUMAR**

Associate Professor, Department Of Electronics And Communication Engineering  
*J N N College of Engineering*  
*Shimoga, Karnataka, India*

**DR. S. M. SUBASH**

Associate Professor, Department Of Civil Engineering  
*Guru Nanak Institute of Technology*  
*Ibrahimpattanam, Telangana, India*

**DR. SIDDLINGAPPAGOUA BIRADAR**

Associate Professor, Department Of Electronics And Communication Engineering  
*Dayananda Sagar Academy of Technology and Management*  
*Bangalore, Karnataka, India*

**DR. T. NADANA RAVISHANKAR**

Associate Professor, Department Of Computer Science And Engineering.  
*Veltech High Tech Dr. Rangarajan Sakunthala Engineering College*  
*Chennai, Tamil Nadu, India*

**DR. THIYAGARAJAN VENKATRAMAN**

Associate Professor, Department Of Electrical And Electronics Engineering  
*SSN College of Engineering*  
*Chennai, Tamil Nadu, India*

**DR. V. ANITHA DEVI**

Associate Professor, Department Of Social Sciences And Languages  
*Vellore Institute of Technology*  
*Katpadi, Tamil Nadu, India*

**DR. VEERABHADRAPPA ALGUR**

Associate Professor, Department Of Mechanical Engineering  
*R Y M ENGINEERING COLLEGE*  
*Ballari, Karnataka, India*

**DR. VENKATESH KOUDAGANI**

Associate Professor, Department Of Civil Engineering  
*Vaageswari College of Engineering*  
*Karimnagar, Telangana, India*

**DR. Y. THIAGARAJAN**

Associate Professor, Department Of Electrical And Electronics Engineering  
*Christ College Of Engineering And Technology*  
*Puducherry, India*

**DR.B.GOKULA KRISHNAN**

Associate Professor, Department Of Electrical And Electronics Engineering  
*P.S.V College of Engineering and Technology*  
*Krishnagiri, Tamil Nadu, India*

**DR.M.SENBAGAVALLI**

Associate Professor, Department Of Information Technology  
*Alliance College of Engineering and Design*  
*Bangalore, Karnataka, India*

**DR.N.RAVI KUMAR**

Associate Professor, Department Of Master Of Business Administration  
*Kalaighnar karunanidhi Institute of Technology*  
*Coimbatore, Tamil Nadu, India*

**DR.N.SABIYATH FATIMA**

Associate Professor, Department Of Computer Science And Engineering  
*B.S. Abdur Rahman Crescent Institute of Science and Technology*  
*Vandalur, Tamil Nadu, India*

**DR.P. PERIASAMY**

Associate Professor, Department Of Finance  
*CMS Business School*  
*Bangalore, Karnataka, India*

**DR.R.AMRUTHA**

Associate Professor, Department Of Physics  
*KCG College of Technology*  
*Karapakkam, Tamil Nadu, India*

**DR.R.PARVATHI**

Associate Professor, Department Of Information Technology  
*Hindustan Institute of Technology and Science*  
*Chennai, Tamil Nadu, India*

**Dr.R.RAVI RAJA MALAR VANNAN**

Associate Professor, Mechanical Engineering  
*Anna University*  
*Chennai, Tamil Nadu, India*

**DR.RAJARAJESWARL.P**

Associate Professor, Department Of Computer Science And Engineering.  
*Sreenivasa institute of Technology and Management studies*  
*Chittoor, Andhra Pradesh, India*

**DR.RISHIKAYSH KAAKANDIKAR**

Associate Professor, Department Of Management Science  
*Zeal College of Engineering and Research*  
*Pune, Maharashtra, India*

**DR.S.MOHAN**

Associate Professor, Department Of English  
*Kalasalingam Academy of Research and Education*  
*Krishnankoil, Tamil Nadu, India*

**DR.S.RAMESH**

Associate Professor, Department Of Electronics And Communication Engineering  
*SRM Valliammai Engineering College*  
*Kattankulathur, Tamil Nadu, India*

**DR.S.SHAHIR**

Associate Professor, Department Of Agriculture And Horticulture  
*Kalasalingam Academy of Research and Education*  
*Krishnankoil, Tamil Nadu, India*

**DR.S.VIMAL**

Associate Professor, Department Of Computer Science And Engineering  
*Ramco Institute of Technology*  
*Rajapalayam, Tamil Nadu, India*

**DR.SONALI RIDHORKAR**

Associate Professor, Department Of Computer Science And Engineering.  
*G.H.Raisoni Institute of Engineering and Technology*  
*Nagpur, Maharashtra, India*

**DR.T.SHEELA**

Associate Professor, Department Of Electronics And Communication Engineering  
*V.M.K.V. Engineering College*  
*Salem, Tamil Nadu, India*

**Dr.V.SARANYA**

Associate Professor, Department Of Information Technology  
*Sri Krishna College of Engineering and Technology*  
*Coimbatore, Tamil Nadu, India*

**DR.V.VASAN PRABHU**

Associate Professor, Department Of Electrical And Electronics Engineering  
*SRM Institute of Science and Technology*  
*Chennai, Tamil Nadu, India*

**G.L.ANAND BABU**

Associate Professor, Department Of Information Technology  
*Anurag University*  
*Hyderabad, Telangana, India*

**KATTUPALLI SUDHAKAR**

Associate Professor, Department Of Computer Science And Engineering.  
*PSCMR College of Engineering and Technology*  
*Vijayawada, Andhra Pradesh, India*

**PROF (DR) VIJAY B GADICHA**

Associate Professor, Department Of Computer Science And Engineering.  
*G H Raisonni University*  
*Amravati, Maharashtra, India*

**PROF. DR. RAJNIKANT BHAGWAN WAGH**

Associate Professor, Department Of Computer Science And Engineering.  
*R. C. Patel Institute of Technology*  
*Shirpur, Maharashtra, India*

**QUTUBUDDIN S.M**

Associate Professor, Department Of Industrial & Production Engineering  
*P.D.A. College of Engineering*  
*Kalaburagi, Karnataka, India*

**Shri. CHANDRA SHEKAR KUTUR**

Associate Professor, Department Of Computer Science & Engineering  
*GURU NANAK INSTITUTIONS TECHNICAL CAMPUS*  
*Ibrahimpattanam, Telangana, India*

**Y V SUBRAHMANYAM**

Associate Professor, Department Of Applied Mathematics  
*IBS College*  
*Hyderabad, Telangana, India*

**K.SREEKANTH**

Associate Professor, Department Of Computer Science And Engineering  
*NALLA NARASIMHA REDDY EDUCATION SOCIETY'S GROUP OF INSTITUTIONS*  
*Hyderabad, Telangana, India*

**DR. A. MALLIKARJUNA REDDY**

Assistant Professor, Department Of Computer Science And Engineering  
*Anurag University*  
*Hyderabad, Telangana, India*

**DR. AJAY B. GADICHA**

Assistant Professor, Department Of Computer Science And Engineering.  
*P.R.Pote College of Engineering and Management*  
*Amravati, Andhra Pradesh, India*

**DR. BABITA TYAGI**

Assistant Professor, Department Of Humanities & Social Sciences  
*KIET group of Institutions*  
*Ghaziabad, Uttar Pradesh, India*

**Dr. Jayashri N. Nair**

Assistant Professor, Department Of Mechanical Engineering  
*VNR Vignana Jyothi Institute of Engineering and Technology*  
*Hyderabad, Telangana, India*

**DR. L. RAGHAVENDAR RAJU**

Assistant Professor, Department Of Computer Science And Engineering  
*Matrusri Engineering College*  
*Hyderabad, Telangana, India*

**DR. MAHIP M BARTERE**

Assistant Professor, Department Of Computer Science And Engineering.  
*G H Raisonni University*  
*Amravati, Maharashtra, India*

**DR. P. CAROLINE CYNTHIA**

Assistant Professor, Department Of English  
*Bannari Amman Institute of Technology*  
*Sathyamangalam, Tamil Nadu, India*

**DR. SAMEER BABU M**

Assistant Professor, Department Of Education  
*University of Kerala*  
*Thiruvananthapuram, Kerala, India*

**DR. SANMAN .S**

Assistant Professor, Department Of Mechanical Engineering  
*Acharya Institute of Technology*  
*Bengaluru, Karnataka, India*

**ASHISH KUMAR SINGH**

Assistant Professor, Department Of Mechanical Engineering  
*Hyderabad Institute of Technology And Management*  
*Hyderabad, Telangana, India*

**ASHISH LADDA**

Assistant Professor, Department Of Computer Science And Engineering.  
*Balaji Institute of Technology & Science*  
*Warangal, Telangana, India*

**ASWATHY N**

Assistant Professor, Department Of Electronics And Communication Engineering  
*Adi Shankara Institute of Engineering and Technology*  
*Kalady, Kerela, India*

**CHEMPAK KUMAR A**

Assistant Professor, Department Of Electronics And Communication Engineering  
*College of Engineering Muttathara*  
*Thiruvananthapuram , Kerala, India*

**D. CHAITHANYA**

Assistant Professor, Department Of Information Technology  
*Vignan Institute of Technology and Science*  
*Deshmukhi, Telangana, India*

**Jaheer Mukthar KP**

Assistant Professor, Department Of Economics  
*Kristu Jayanti College Autonomous*  
*Bangalore, Karnataka, India*

**K.CHANDRA SEKHAR**

Assistant Professor, Department Of English  
*Vignan Institute of Technology and Science*  
*Hyderabad, Telangana, India*

**MR. K. RAVIKANTH**

Assistant Professor, Department Of Computer Science And Engineering  
*Rajiv Gandhi University of Knowledge Technologies*  
*Hyderabad, Telangana, India*

**MR. M SHANKAR**

Assistant Professor, Department Of Electrical And Electronics Engineering  
*Siddhartha Institute of Engineering and Technology*  
*Ibrahimpatnam, Telangana, India*

**NAREGALKAR AKSHAY RANGNATH**

Assistant Professor, Department Of Electronics & Instrumentation Engineering  
*VNR Vignana Jyothi Institute Of Engineering And Technology*  
*Hyderabad, Telangana, India*

**SHAIK IRFAN**

Assistant Professor, Department Of Mechanical Engineering  
*M.J. College of Engineering & Technology*  
*Hyderabad, Telangana, India*

**Mr. Jerison Scariah James**

Technical Director,  
*Structcon Building Technologies*  
*Kochi, Kerala, India*

**NILANJAN TARAFDER**

Senior Research Scholar, Department Of Civil Engineering  
*National Institute of Technology*  
*Silchar, Assam, India*

**VIJAY KRISHNA**

Founder And Principal Architect,  
*Vision Architects and Interior Designers*  
*Chennai, Tamil Nadu, India*





# CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
1.	A Study on Dynamic Response of High-Rise Buildings Using High Damping Rubber Bearing Base Isolator <ul style="list-style-type: none"> <li>➤ <i>S. Mallikarjun</i></li> <li>➤ <i>A. Shruthi</i></li> </ul>	1
2.	Comparative study of Plyometrics pushups versus plyometrics drills exercises for throwing accuracy in basketball players <ul style="list-style-type: none"> <li>➤ <i>Dr. Jaishree Tiwari</i></li> <li>➤ <i>Dr. Sunil Sharma</i></li> <li>➤ <i>Vikas Tiwari</i></li> </ul>	2
3.	Engineering Profession as a Career Parental Pressure or Desire: A Statistical Analysis <ul style="list-style-type: none"> <li>➤ <i>Devanarayanan B S</i></li> <li>➤ <i>Lasitha A</i></li> </ul>	3
4.	A Gender wise study of Academic stress and it's source among Professional Students <ul style="list-style-type: none"> <li>➤ <i>Adish O</i></li> <li>➤ <i>Lasitha A</i></li> </ul>	4
5.	Role of MGNREGA in the Rejuvenation of Rural Economy after Mega Flood <ul style="list-style-type: none"> <li>➤ <i>Anusree M</i></li> <li>➤ <i>Sarika SG</i></li> <li>➤ <i>Manjusha R</i></li> </ul>	5
6.	A Statistical Analysis of Household Expenditure and Income in Keral <ul style="list-style-type: none"> <li>➤ <i>Athira P K</i></li> <li>➤ <i>Lasitha A</i></li> </ul>	6
7.	Covid Pandemic-Parents Concern on Higher Education <ul style="list-style-type: none"> <li>➤ <i>Nayana Madhu</i></li> <li>➤ <i>Ponnu Soman</i></li> <li>➤ <i>Sathidevi C</i></li> </ul>	7
8.	Impact of Covid-19 Pandemic on Education in Schools of Kerala State <ul style="list-style-type: none"> <li>➤ <i>Ponnu Soman</i></li> <li>➤ <i>Nayana Madhu</i></li> <li>➤ <i>Sathidevi C</i></li> </ul>	8
9.	The Impact of Celebrity Endorsement on Consumer Attitude and Buying Intention <ul style="list-style-type: none"> <li>➤ <i>Sanath Chandran</i></li> <li>➤ <i>Lasitha A</i></li> </ul>	9
10.	Adoption of eSCM and TOE Framework: Impact of Firm Size <ul style="list-style-type: none"> <li>➤ <i>Dr.Anusha Sreeram</i></li> <li>➤ <i>Haridoss Ellanti</i></li> </ul>	10

# CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
11.	Lean and Six-Sigma Principles for Green Building Development <ul style="list-style-type: none"> <li>➤ <i>Narayanan M</i></li> <li>➤ <i>Nivedha Raghu K</i></li> </ul>	11
12.	Emotional level cause detaches in text analysis using Pre-trained BERT Model of NLP Technique <ul style="list-style-type: none"> <li>➤ <i>K. Jayanthi</i></li> <li>➤ <i>Dr.D.Kavitha</i></li> </ul>	12
13.	Feature Extraction of Corneal ulcer and Images Classification using Deep Convolutional Network with VGG 16 Model <ul style="list-style-type: none"> <li>➤ <i>S.Janet Grace Susila</i></li> <li>➤ <i>Dr.D. Kavitha</i></li> </ul>	13
14.	Impact of COVID-19 Pandemic on General Population: Vaccination, Age Group Analysis <ul style="list-style-type: none"> <li>➤ <i>S P Devakrishnan</i></li> <li>➤ <i>Anju Asokan</i></li> </ul>	14
15.	Assessment of Selected Hill Slopes Stability in Aizawl Municipal Area, Mizoram, India <ul style="list-style-type: none"> <li>➤ <i>K Zirsangzeli</i></li> <li>➤ <i>Dr. Rebecca Ramhmachhuani</i></li> </ul>	15
16.	Relevance of Queuing theory to relegate waiting epoch at the Covid-19 vaccination centre using simulated approach <ul style="list-style-type: none"> <li>➤ <i>Parvathy. G</i></li> <li>➤ <i>Sreelatha. K. S</i></li> </ul>	16
17.	A Comparative Study of Identifying the Most Prompting Nodes in a Network Using Efficiency of Navigating Agents <ul style="list-style-type: none"> <li>➤ <i>Malavika S</i></li> <li>➤ <i>Sarga G</i></li> <li>➤ <i>Manjusha R</i></li> </ul>	17
18.	Ranking of Airports Based on Operational Efficiency Using PROMETHEE and CRITIC Methods <ul style="list-style-type: none"> <li>➤ <i>Dr. Ishvinder Singh</i></li> <li>➤ <i>Prof. Rajeev Ranjan</i></li> <li>➤ <i>Prof. Sachin Kumar</i></li> </ul>	18
19.	A System to Detect Violations of Social Distance <ul style="list-style-type: none"> <li>➤ <i>Janani Chennupati</i></li> <li>➤ <i>Atluri Naga Sai Sri Vybhavi</i></li> <li>➤ <i>Bomminayuni Gireeshma</i></li> <li>➤ <i>Devarapu Vasundhara</i></li> <li>➤ <i>Vani, K. Suvarna</i></li> </ul>	19

# CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
20.	Road Safety and Traffic Management using IoT– Challenges, Issues and Solutions <ul style="list-style-type: none"> <li>➤ <i>N. Jagadeesh</i></li> <li>➤ <i>Dr.D. Kavitha</i></li> </ul>	20
21.	A Case Study of Job Implementation by Mgnrega in All Districts of Kerala <ul style="list-style-type: none"> <li>➤ <i>Anjali Suresh</i></li> <li>➤ <i>Sarika SG</i></li> <li>➤ <i>Manjusha R</i></li> </ul>	21
22.	Identification of Brain Tumor with the Help of Convolution Neural Networks <ul style="list-style-type: none"> <li>➤ <i>R.S.S.Raju Battula</i></li> <li>➤ <i>Ravi Kishore Veluri</i></li> <li>➤ <i>Y.Durga Prasad</i></li> <li>➤ <i>S.Rama Sree</i></li> </ul>	22
23.	Early Prediction of Brain Disorders by Machine Learning Classifiers <ul style="list-style-type: none"> <li>➤ <i>B.Venkataramanaiah</i></li> <li>➤ <i>V.P.Naveen Kumar Reddy</i></li> <li>➤ <i>K.Vishnu Vardhan Reddy</i></li> <li>➤ <i>V.Lakshmi Prasanna Kumar</i></li> </ul>	23
24.	VLSI Implementation of Lossless ECG Compression Algorithm Using Adaptive Trending Prediction <ul style="list-style-type: none"> <li>➤ <i>A.Rajani</i></li> <li>➤ <i>Adabala Sai Sankar</i></li> </ul>	24
25.	Diagnosis of ECG signal for Signal Quality using Convolutional Neural Networks <ul style="list-style-type: none"> <li>➤ <i>M. Gayathri</i></li> <li>➤ <i>A. Rajani</i></li> </ul>	25
26.	Awareness of Polycystic Ovarian Syndrome among Females from Urban and Rural Area-A Comparative Analysis <ul style="list-style-type: none"> <li>➤ <i>Renuka Jakhar</i></li> <li>➤ <i>Elina Dewanji Sen</i></li> <li>➤ <i>Rohit Dutt</i></li> </ul>	26
27.	Indian millennials and gen Z: Attitudes towards Technology, Social Media Usage, and Psychological Health <ul style="list-style-type: none"> <li>➤ <i>Dimple Kariya</i></li> <li>➤ <i>Geetika Tankha</i></li> </ul>	27
28.	In-depth Review of Different Price Optimization Techniques used by Omni-Channel Retailers <ul style="list-style-type: none"> <li>➤ <i>Amita Garg</i></li> <li>➤ <i>Dr. Rajnish Rakholia</i></li> </ul>	28

# CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
29.	Statistical Analysis on Post Covid-19 Diseases ➤ <i>Akhilesh R</i> ➤ <i>Sreelatha K.S</i>	29
30.	A Study on Green Human Resource Management Practices and its effect on Employee Motivation and Organisational Commitment ➤ <i>Dr. Nancy Goel</i>	30
31.	Survey on Various Secured Authentication Methods in Cloud Computing Environment ➤ <i>Komathi K</i> ➤ <i>Dr. D. Kavitha</i>	31
32.	Survey on Various Efficient Framework to Optimize Security Threats in Cloud Computing ➤ <i>Divya S</i> ➤ <i>Dr. D. Kavitha</i>	32
33.	Comprehensive analysis of Mechanical Biological Treatment rejected fraction as a source of RDF ➤ <i>Dimple Kariya</i> ➤ <i>Geetika Tankha</i>	33
34.	Classification of Skin Disease Image using Texture and Color Features ➤ <i>M. Kalaiyarivu</i> ➤ <i>Dr.N.J. Nalini</i>	34
35.	Self-Paced Learning: A Challenge to Modular Distance Learners in the New Normal Education Setting ➤ <i>Marjorie P. Caslib</i>	35
36.	Fantastic Computing Machine (FCM): A paradigm-shifting ML Model Deployment Strategy ➤ <i>Aditya Agarwal</i> ➤ <i>Nilesh Kumar Mandal</i> ➤ <i>Dr. Ramalakshmi K</i>	36
37.	Value Driven Strategy for Responsible Business: The Tesco case, UK ➤ <i>Pham Ngoc Thu Trang</i>	37
38.	Innovation Oneotourism approach to wine positioning- The manifestation of tourism case in Vina Arnaiz, Spain ➤ <i>Pham Ngoc Thu Trang</i>	38
39.	Image Processing System for disease prediction (AI in health care) ➤ <i>Dr Adilakshamma T</i> ➤ <i>Bharani Lokesh T</i>	39

**ICMIAR-21**

**3<sup>rd</sup> International Conference on  
Multidisciplinary Innovation in  
Academic Research**

**25<sup>th</sup> – 26<sup>th</sup> November, 2021**

# **ABSTRACTS**

---

**ICMIAR - 2021**

**Organized by  
Institute For Engineering Research and Publication (IFERP)**



## **A Study on Dynamic Response of High-Rise Buildings Using High Damping Rubber Bearing Base Isolator**

**S. Mallikarjun**, M. tech student, CVR College of Engineering, Hyderabad

**A. Shruthi**, Assistant Professor, CVR College of Engineering, Hyderabad

### **Abstract**

The destruction caused by a seismic event can result in both high casualties and economic damage to buildings and people who live in seismic hazard zones. Following each earthquake, a significant amount of damage has been documented, as evidenced by previous catastrophic events. These constructions must be protected from seismic activity to lessen the negative impacts on buildings without causing the entire structure to collapse. Many seismic retrofitting approaches are currently being used to preserve these RC structures and improve their performance during a seismic event. To counteract the effect of the seismic hazards, base isolation is one of the best techniques against the earthquake.

The seismic behavior of a structure with a fixed base and a structure with base isolation is studied in this work using linear and non-linear dynamic analysis as prescribed by IS Codal. The effects of different types of base isolator systems are considered in the modelling of RC buildings for symmetric and asymmetric plan configurations of both G+7 and G+10 storey heights, using the ETABS package. For isolated base and fixed base situations, many characteristics such as storey drift, base shear, Storey displacement, and time period are compared.

### **Index Terms**

Base isolator, High damping Rubber bearing (HDRB), Storey drift, Base shear, Time period, Storey displacement.

## **Comparative study of Plyometrics pushups versus plyometrics drills exercises for throwing accuracy in basketball players**

**Dr. Jaishree Tiwari**, PhD Scholar Department of Physiotherapy, College of Physiotherapy, NIMS University Rajasthan, Jaipur

**Dr. Sunil Sharma**, Principal Department of Physiotherapy, College of Physiotherapy, NIMS University Rajasthan, Jaipur

**Vikas Tiwari**, HOD Department of medical lab technology, University Institute of Allied health science, Chandigarh University, Mohali, Punjab.

### **Abstract**

**Introduction:** Basketball is one of the most admired and recognized sports worldwide which is played in Teams. plyometric training is a simple method of giving a player a variety of exercises that will improve the three main functions i.e., speed, strength and agility, related to performance on the field. Plyometric training involves lengthening of muscle followed by quick shortening contraction that enhances capability of muscle to produce large amount of force.

**Aim:** To compare the effectiveness of plyometric trainings (Pushup vs Drills) on speed, strength and agility in aspiring Basketball players.

**Materials and Methods:** The present study entitled “Comparative study of Plyometrics pushups versus plyometrics drills exercises for throwing accuracy in basketball players.” was carried out at Dehradun under department of physiotherapy. The present study had an experimental study design. 6-week plyometric training program included plyometric push up training and plyometric drills with the help of medicine ball (2kg). 30 male Basketball players in the age group of 18-25 years were included in this comparative study and randomly divided into two groups: Plyometric training for Group A (Plyometric pushup group) is (Clap pushup, lateral explosive pushups and linear explosive pushups) with 15 players in group and Plyometric training for Group B (Plyometric drills) is (Overhead throw side throw and squat throw) with 15 players in a group. All players were evaluated for upper limb strength, agility, running speed with Vertical Jump Test and S3P test. Basketball players performed warm up 15 minutes, Plyometric training 15 minutes, and cool down for 15 minutes. Paired t-test was used to compare the differences within the group and unpaired t-test was used to compare the difference between groups. Data was collected for all variables at baseline, 3rd and end of 6th week.

**Results:** This finding demonstrates the necessity of a plyometric conditioning program for enhancing performance of basketball players. In activities which involve acceleration, deceleration and a change of direction. The results of this study demonstrate that plyometric push up training is effective as compared to plyometrics drills with help of medicine ball in basketball training for upper limb throwing accuracy. As this training significantly improved performance in the plyometric push up group as compared to plyometrics drills with help of medicine ball training group.

### **Keywords**

Plyometric Pushup, Plyometric drills, Basketball, exercise



**Engineering Profession as a Career Parental Pressure or  
Desire: A Statistical Analysis**

**Devanarayanan B S**, Department of Mathematics, Amrita School of Arts and Science,  
Amrita Vishwa Vidyapeetham, Amritapuri campus, Kollam, Kerala India

**Lasitha A**, Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa  
Vidyapeetham, Amritapuri campus, Kollam, Kerala India

**Abstract**

The purpose of this research is to evaluate the possible factors that influence the career choices of engineering students and While working on engineering, the positive and negative effects of parental pressure. In this procedure, I have used a descriptive survey of 158 students from various engineering branches of the private and government engineering colleges of Kerala. Male (78.5%) and female (21.5%) students were selected as samples in this survey. The survey results show the positive and negative effects of parental stress. Family influence does not necessarily have a significant negative impact. The stressors involved usually result in the loss of valuable intellectual resources; otherwise, these resources can make a significant contribution to society. Used the Social Science Statistical Package (SPSS) software for analysis.

## **A Gender wise study of Academic stress and it's source among Professional Students**

**Adish O**, Student, Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

**Lasitha A**, Assistant Professor(Sr Grade), Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

### **Abstract**

Due to various expectations, stress has become part of the academic life of students. With changes at the personal and social levels, young people are particularly vulnerable to problems related to academic pressure. Therefore, understanding the source and impact of academic pressure is necessary to develop a fully effective intervention strategy. The main goal of this research is to understand if students are under academic pressure. Furthermore, this study also aims to understand if there are gender differences and stream differences in the academic pressure reported by the participants. The different dimensions of stress assessed by the measurement of academic stress also point to differences in gender and course. Assume that there are significant gender differences and mobility differences in academic pressure. It is also assumed that the dimension of stress will also vary significantly between gender and different streams. Researchers conducted online and offline surveys, Among the 200 students invited to participate in the survey (100% response rate), five-point Likert scale used for this study. The reliability of the questionnaire was calculated using cronbach alpha (0.871).,the latest version of statistical software SPSS was used for the analysis part.

### **Keywords**

Academic Stress; Gender wise stress, stream wise, Anxiety; Sources of Stress

## **Role of MGNREGA in the Rejuvenation of Rural Economy after Mega Flood**

**Anusree M**, Student, Amrita Vishwa Vidyapeetham

**Sarika SG**, Faculty, Amrita Vishwa Vidyapeetham

**Manjusha R**, Faculty, Amrita Vishwa Vidyapeetham

### **Abstract**

Kerala encountered a mega flood in August 2018. Almost every native of Kerala was affected by this disaster. Most vulnerable among them were the rural people. They lost their savings of a lifetime and even their livelihood too. In this study, we are trying to portray the increased dependence on MGNREGA in rural areas for livelihood after flood. For this study we have considered seven Grama Panchayats of Haripad block as our sample. These panchayats come under the Kuttanad region of Alappuzha district. The lives of the natives of this region mostly depends on agriculture and related activities. These people stands socially and economically weaker and very well represents the rural society of Kerala. We have collected secondary data from government sites and gram panchayat registers. This data was then analyzed using statistical and graphical tools. The analysis results evidently describes the increased dependance on MGNREGA by the rural economy after the flood in Kerala.

### **Index Terms**

MGNREGA, Households (HH), Physical progress, Financial progress.

## **A Statistical Analysis of Household Expenditure and Income in Kerala**

**Athira P K**, Student, Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

**Lasitha A**, Assistant Professor(Sr.Grade), Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

### **Abstract**

The researcher attempts to determine each family's income and expenditure, how they differ from one another, how many families struggle to meet basic needs such as groceries, transportation, medicine, education, electricity, and so on, and, most importantly, whether expenditure exceeds income in families in this analysis. It is critical to examine the spending and income patterns of Kerala households, with an emphasis on income, expenditure, borrowing, and saving. The biggest determinant of an individual's consumption spending is his or her income level. However, income isn't the only element that affects expenditure, loans and savings also have an impact. Spending, of course, satisfies basic requirements. This analysis involved hypothesis testing that will be established between income and quality of life measures based on secondary data was part of this investigation. To assess the elements that influence household expenditure, a multiple regression model was utilized. The monthly household expenditure was the dependent variable, and a number of socioeconomic indicators were used as explanatory variables, based on data from a random sample of 100 families.

### **Keywords**

expenditure, household, income, savings.

## **Covid Pandemic-Parents Concern on Higher Education**

**Nayana Madhu**, Integrated MSc Mathematics, Department of Mathematics, Amrita Vishwa Vidyapeetham, Amritapuri, India

**Ponnu Soman**, Integrated MSc Mathematics, Department of Mathematics, Amrita Vishwa Vidyapeetham, Amritapuri, India

**Sathidevi C**, Department of Mathematics, Amrita Vishwa Vidyapeetham, Amritapuri, India

### **Abstract**

Due to the covid 19 pandemic, the world is currently using online schooling. In this new system, parents play a critical part in their children's education. This study focuses on the key worries that parents have as a result of the new system. A total of 100 data from parents with children in high school and higher secondary school were collected. To get at the final outcome, the data was analyzed using R programming language. According to the study, parents have a variety of viewpoints, such as trying to cope with the new mode owing to current issues, while others are more concerned. That is, parents are dissatisfied with online education and prefer traditional learning.

### **Index Terms**

Covid-19, Online education, Parents concern, R-programming, Statistical tools.

## **Impact of Covid-19 Pandemic on Education in Schools of Kerala State**

**Ponnu Soman**, Integrated MSc Mathematics, Department of Mathematics, Amrita Vishwa Vidyapeetham, Amritapuri, India

**Nayana Madhu**, Integrated MSc Mathematics, Department of Mathematics, Amrita Vishwa Vidyapeetham, Amritapuri, India

**Sathidevi C**, Department of Mathematics, Amrita Vishwa Vidyapeetham, Amritapuri, India

### **Abstract**

Covid-19's effect on our society shifts our traditional educational framework to online learning. To complete the educational curriculum, this modern mode of educational system uses a variety of applications such as Microsoft Teams, Zoom, Google

Classroom and others. In this study, the authors are attempting to determine whether this modern form of online education is beneficial or not. This article is based on the situations during the first phase of Covid-19. The authors conducted a comprehensive survey of 190 students from high school and higher secondary school to collect data required for the study. The data was then interpreted graphically and statistically using R programming language to provide a simple image of the subject at hand. Through this survey, the authors infer that online class have both benefits and drawbacks, but the disadvantages outnumber the benefits.

### **Key words**

Education system, Google Classroom, Kite Victers, Online and offline classes. R-Programming, Traditional education system, Zoom meeting.

## **The Impact of Celebrity Endorsement on Consumer Attitude and Buying Intention**

**Sanath Chandran**, Student, Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

**Lasitha A**, Assistant Professor(Sr.Grade), Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

### **Abstract**

Advertising is often used to publicize and promote products. Measuring the amount of advertising that attracts customers is controversial. The objective of this work is to find out how much advertising influences consumer buying behavior. This study focuses on the various factors that influence their purchase decision, reason for their preferences for a particular brand, extend of brand loyalty and effect of celebrity endorsement on purchase decision during the purchase of readymade apparels. The data of 100 respondents are collected through a questionnaire and the results were analyzed by the latest version of SPSS. Data was evaluated through descriptive statistics, correlation analysis, and regression analysis, among other statistical approaches. Moreover, the tested attributes of celebrity show positive relationship. Furthermore, celebrity traits that have been studied have a positive correlation with purchasing behavior and brand perception. It was also established that celebrity endorsement has a substantial impact on purchasing decisions. However, regardless of the source of advertisement, customers place a higher value on product quality.

### **Index Terms**

Brand image, buying behavior, buying intention, celebrity endorsement, quality of product.

## **Adoption of eSCM and TOE Framework: Impact of Firm Size**

**Dr. Anusha Sreeram**, Assistant Professor, IBS Hyderabad, IFHE University

**Haridoss Ellanti**, DGM, Siemens Healthineers Pvt.Ltd

### **Abstract**

eSCM refers to “IT enabled support in implementing SCM process”(Wu and chang,2010). Adoption of eSCM promises improvement in performance by enabling collaboration and flexibility in the supply chain. eSCM helps the firms to serve the markets faster i.e. to attain agility in the supply chain. It is important to understand the factors that influence the adoption of eSCM by both large enterprises (LEs) and SMEs as both the groups have unique characteristics. For example, SMEs are more flexible and LEs have more resources. There exists a need in this area to conduct a holistic research on the factors affecting the adoption of eSCM in agile supply chain besides examining the moderating effect of firm size. An extensive literature review is conducted and a theoretical model is proposed based on the transaction cost theory, institutional theory and TOE framework to examine the adoption of eSCM in agile supply chain and to analyze how those effects are moderated by firm size, SMEs (vs) LEs. Propositions are formulated and future research directions are discussed.



## **Lean and Six-Sigma Principles for Green Building Development**

**Narayanan M**, School of Environment Architecture and Design, SRM Institute of Science and Technology

**Nivedha Raghu K**, School of Environment Architecture and Design, SRM Institute of Science and Technology

### **Abstract**

In the construction industry, around 5% wastage in materials is incurred during exterior construction. The figure is appalling at 20% in case of interior works. Material waste increases process time and deteriorates quality, all of which affects the environment. Though green buildings reduce environmental impact, companies hesitate to adopt green due to higher estimated costs. After careful study, this work is able to attribute most of the additional costs to poor planning. This paper proposes that using Lean and Six-Sigma principles can save time, cost, and materials in green building construction. By implementing the same in toilet interior construction, significant savings were achieved throughout various processes, including up to 97.4% and 94.56% decrease in process duration for wall tile fixing and floor tile laying respectively. This study was also able to report up to 17.09% savings in material utilization for partitions and an overall 5-7% reduction in environmental impact. Extending this framework to entire buildings can be conducive to never-seen-before environmental conservation.

## **Emotional level cause detaches in text analysis using Pre-trained BERT Model of NLP Technique**

**K. Jayanthi**, Full Time Research Scholar, Department Of Computer Science And Applications, St. Peter's Institute Of Higher Education And Research, Chennai, India.

**Dr.D.Kavitha**, Associate Professor, Department Of Computer Science And Applications, St. Peter's Institute Of Higher Education And Research, Chennai, India

### **Abstract**

Emotional level cause detaches (ELCD), the process enterprise to extract the probable causes behind certain emotions in text, has grown much attention in recent years due to its wide applications.

However, every one of us will struggle with our emotions when we are in any emergency, the emotions must be annotated before its causes any critical end.

This approach has enhanced an important part of a wide range of applications including politics, business, advertising and marketing.

In this research, we propose a dynamic task extracting the emotions and the appropriate causes in the document by Recently, pre-trained Transformer based models (e.g., BERT, XLNet) have brought considerable breakthroughs in the field of natural language processing (NLP). In this research, we have conducted a systematic evaluation of the BERT model while analyzing the emergency texts.

Our research work discusses the results show that BERT model is more effective for emotional analysis or in future expansion with some other efficient models with accurate results.

### **Key words**

ELCD,BERT,NLP.

## **Feature Extraction of Corneal ulcer and Images Classification using Deep Convolutional Network with VGG 16 Model**

**S.Janet Grace Susila**, Research Scholar, Department of Computer Science and Applications, St. Peter's Institute of Higher Education and Research, Chennai, India.

**Dr.D. Kavitha**, Associate Professor, Department of Computer Science and Applications, St. Peter's Institute of Higher Education and Research, Chennai, India.

### **Abstract**

Corneal Ulcer is also known as keratitis, which represents the most often appearing induction among corneal diseases. Penalty such as irreversible eyesight damage or blindness requires an modern advance that enables a difference to be made between patterns of different ulcer stages to lower the global trouble of visual weigh down. This paper describes a Deep Convolutional Neural Network image classification advance allows the identification of different types of Corneal ulcers based extracting features of ulcer images. Our proposed method is tough relevance and allows automated extraction of meaningful features, manifesting a strong practical and theoretical consequence. The VGG16model represents a high-routine network for large-scale image classification and method for investigating CUs data preprocessing tasks. By identifying Corneal Ulcers at an early stage, we aid decline of provocation applying and induction tracking efficacyadapted medical treatment, which contributes to IT-based healthcare. Work can be better seen as two different tasks. In the first task, Data Preprocessing is used for feature extraction and classification task. In the second task, features are extracted using DCNN. Experimental studies shows that the performance of classification on DCNN extracted features are slightly better than the results of neural network classification on of DCNN.

### **Keywords**

Feature Extraction, Deep Convolutional Neural Network, VGG16 model.

## **Impact of COVID-19 Pandemic on General Population: Vaccination, Age Group Analysis**

**S P Devakrishnan**, Student, Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

**Anju Asokan**, Asst. Professor, Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

### **Abstract**

Coronavirus disease 2019 (COVID-19) is a disease caused by severe acute respiratory syndrome coronavirus 2 (SARS CoV-2). It was confirmed on March 11, 2020, by the World Health Organization as pandemic disease. Regrettably, the spread of the virus and mortality due to COVID-19 has continued increasing daily. Hence, it is essential to rectify the spread of the disease extremely using nonpharmacological protocols such as quarantine, isolation, and public health education. A vaccine provides the favorable hope for a permanent antidote to controlling the pandemic. Considering the instantaneous need for global vaccination, the currently distributed vaccines have been generated with a quick period of testing and hence is a circumstance of concern among the society. Thus, this analysis was conducted to analyze the safety and effectiveness of vaccinations in the Indian state of Kerala. The study was a detailed questionnaire-based survey completed online by focusing on individuals aged  $\geq 18$  years. This work studied the effect of these different vaccines over different age groups under the Bayes theorem.

### **Index Terms**

Age Group, COVID-19, SARS CoV-2, Vaccination

## **Assessment of Selected Hill Slopes Stability in Aizawl Municipal Area, Mizoram, India**

**K Zirsangzeli**, Research Scholar, Dept of Civil Engineering, Mizoram University

**Dr. Rebecca Ramhmachhuani**, Dept of Civil Engineering, Mizoram University

### **Abstract**

Mizoram is located in the north-eastern border of India. A survey conducted by Mizoram Remote Sensing Application Centre (MIRSAC) in 2015 has revealed that 12,705.69 square kilometers of Mizoram which accounts for 60.25 percent of the state's total geographical area, falls under 'seismic zone V', meaning that earthquake of high magnitude can rock the mountainous state anytime. Aizawl, the capital of Mizoram is a hilly region in which landslides are a common natural hazard. Landslides are caused by excessive rainfall, cutting of hill slopes, deforestation, steep slopes, and erosion. Properties of soil have great impact on the gauging of stability of slopes. In a hilly area, the higher the slope gradient and height, the less stable the slopes are. On the contrary, depending on the soil qualities, slopes with a lower gradient and height might also become unstable. To investigate the soil types, samples were collected from eleven (11) selected slopes of Bawngkawn, Muanna Veng, Ramhlun Complex, Mualpui, Saron, Lower Dintar, Upper Dintar, Durtlang, Kulikawn, Ramthar North and Tanhril which is located in Aizawl Municipal Area, Mizoram. Three (3) layers of soil were obtained at a depth of 30-60 cm from various selected slopes. According to field observations, slope angles in the impacted locations range from 30° to 60° and the slope height ranges from 12 to 25 metres. GEO5 software was used to perform Limit Equilibrium Method (LEM) analysis to assess the stability of slopes in the impacted areas. The data obtained from field observation and laboratory test were implemented during LEM analysis. Out of eleven, five of the slopes were found to be stable having factor of safety greater than 1.5 where six of the other slopes were found to be unstable having factor of safety less than 1.5. It can be concluded that, based on parametric analyses, the slope gradient has a consequential impact on slope stability

## **Relevance of Queuing theory to relegate waiting epoch at the Covid-19 vaccination centre using simulated approach**

**Parvathy. G**, Department of Mathematics, Amrita Vishwavidyapeetham, Amritapuri Campus, Kollam, India

**Sreelatha. K. S**, Department of Mathematics, Amrita Vishwavidyapeetham, Amritapuri Campus, Kollam, India

### **Abstract**

Queues are a ubiquitous part of everyday life. Queuing theory provides a rich and useful set of mathematical models for the analysis and design of service process for which there is contention for shared resources. Delays are the result of a disparity between demand for a service and the capacity available to meet that demand. The Covid-19 pandemic has ravaged the world, posing an unprecedented threat to humanity. And Covid-19 vaccination programmes are underway globally. The primary goal of this paper is to provide a basic understanding of queuing theory and some of the specific queuing models that can be helpful in designing and managing Covid-19 vaccination centre. Data analysis can be done by collecting data from the primary health centre for a period of time.

## **A Comparative Study of Identifying the Most Prompting Nodes in a Network Using Efficiency of Navigating Agents**

**Malavika S**, Postgraduate student, Amrita Vishwa Vidyapeetham, Amritapuri, India

**Sarga G**, Postgraduate student, Amrita Vishwa Vidyapeetham, Amritapuri, India

**Manjusha R**, Assistant Professor, Amrita Vishwa Vidyapeetham, Amritapuri, India

### **Abstract**

Graph theory and network analysis are related in the sense that graphical measures are useful to understand and measure the influence of each node in the network. A properly designed robots called basis elements are placed in the network at unique positions to monitor the activities of the components in the network. Metric dimension of graph is the minimum number of such robots and these robots navigating through the network can sense the shortest distance between any two nodes in the network. In this paper, we explicitly calculate the number of nodes identified by each of the robots and compares with those vertices located at a maximum distance from each of these robots. In that sense we identify the role of other nodes in a network by using two graphical measures namely capacity-1 index and eccentricity of the robots.

### **Key words**

capacity – 1 index, centrality, efficiency, eccentricity, metric dimension.

## **Ranking of Airports Based on Operational Efficiency Using PROMETHEE and CRITIC Methods**

**Dr. Ishvinder Singh**, Department of Management, Doon Business School, Dehradun, India

**Prof. Rajeev Ranjan**, Department of Management, Doon Business School, Dehradun, India

**Prof. Sachin Kumar**, Department of Management, Doon Business School, Dehradun, India

### **Abstract**

The operational efficiency of the airports has become vital of the sustainability of airports. This helps the airports to be recognised as best in terms of facilities for the passengers and also facilitates to increase the revenue by reducing the cost of operations. This paper deals with the ranking of international busiest airports. It has adopted the PROMETHEE GAIA method and CRITIC method for ranking of international airports and for the weights given to alternatives. It takes into consideration a sample of 50 international airports and the 9 comprehensive essential criterions like operational cost, accidents and incidents, distance from city centre , no. of runways etc to rank for the sustainability and efficiency of the airports .The result of the study ranks Dallas/Fort Worth International Airport, Dallas, Hartsfield–Jackson Atlanta International Airport Atlanta O'Hare International Airport Chicago, the best among the sample with regard airport facilities. The results can be used the decision makers of the airport authorities to have an insight over the criterion important for the sustainability and efficiency airports for a longer period of time.

### **Keywords**

International Airports, PROMETHEE -GAIA Approach, CRITIC



## **A System to Detect Violations of Social Distance**

**Janani Chennupati**, Velagapudi Ramakrishna Siddhartha Engineering College

**Atluri Naga Sai Sri Vybhavi**, Velagapudi Ramakrishna Siddhartha Engineering College

**Bomminayuni Gireeshma**, Velagapudi Ramakrishna Siddhartha Engineering College

**Devarapu Vasundhara**, Velagapudi Ramakrishna Siddhartha Engineering College

**Vani, K. Suvarna**, Velagapudi Ramakrishna Siddhartha Engineering College

### **Abstract**

Social distancing is an effective resolution by the World Health Organization (WHO) to minimize the faster break out of COVID-19 in public places. All the governments and national health bodies have set the 2-m as a mandatory physical distance for malls, schools, and other rush areas. The existing algorithms proposed and developed for object detection are SORT (Simple Online and Real-time Tracking) and CNN (Convolutional Neural Networks). The algorithm we are using is YOLOv3. Since YOLOv3 is one of the fastest real-time object detection Algorithms. This system is implemented using CCTV security cameras. For this, a model will be trained against the most comprehensive datasets like COCO datasets. So, identification of high-risk zones i.e. areas with the maximum possibility of virus spreading is done. This may help authorities to upgrade the outline of a public place and to take precautionary measures to diminish the hazardous zones. The progressed framework is a collective and précised solution for object detection that can be implemented in innumerable fields that include autonomous vehicles, human action recognition.

### **Keywords**

social distancing, COVID-19, CCTV cameras, YOLOv3, high-risk zones

## **Road Safety and Traffic Management using IoT– Challenges, Issues and Solutions**

**N. Jagadeesh**, Research Scholar, St. Peter’s Institute of Higher Education and Research

**Dr.D. Kavitha**, Associate Professor, St. Peter’s Institute of Higher Education and Research

### **Abstract**

In current trend IoT has a bigger important in various fields. In which road safety and traffic management is the most needed area for proper management of vehicles on road. As there is less human power these IoT devices are incorporated for providing assistance for human being with regard to usage. The more the usage, there arises problem of reliability as these data helps to avoid accidents in road. In this paper we discuss about the various challenges and issues faced when IoT devices are used and also about the solutions to be considered when the issues occurs in these devices when used for Road Safety and Traffic management for providing utmost safety for the drivers and pedestrians.

### **Keywords**

IoT, Road Safety, Pedestrians

## **A Case Study of Job Implementation by Mgnrega in All Districts of Kerala**

**Anjali Suresh**, Student, Amrita Vishwa Vidyapeetham

**Sarika SG**, Faculty, Amrita Vishwa Vidyapeetham

**Manjusha R**, Faculty, Amrita Vishwa Vidyapeetham

### **Abstract**

The MGNREGA is a vital scheme in the current context of international economic crisis and national economic strike, where increasing collective demand is a main mission for the government. It has been identified that the MGNREGA has the capacity to change rural fiscal and social affairs at numerous steps. The present study is based on the secondary data from different authentic survey sources. This study shows how much effective was the implementation of MGNREGA in various districts of Kerala State. Through this study we make an attempt to establish the relation on total households applied for job cards and relation on material expenditure based on the secondary data related to the districts of Kerala state. Also identify the information regarding the relationship on averages of total job cards issued, averages of total households demanded work and averages of total households allotted work under MGNREGP in various districts of Kerala state in the years 2011-2012 and 2017-2018.

### **Keywords**

ANOVA, Correlation, Job cards, MGNREGA, Regression.

## **Identification of Brain Tumor with the Help of Convolution Neural Networks**

**R.S.S.Raju Battula**, Assistant Professor, Aditya Engineering College ,Surampalem,India

**Ravi Kishore Veluri**, Assoc.Professor, Aditya Engineering College ,Surampalem,India

**Y.Durga Prasad**, Assistant Professor, Aditya College of Engineering ,Surampalem,India

**S.Rama Sree**, Assoc.Professor, Aditya Engineering College ,Surampalem,India

### **Abstract**

Detection of brain tumors of the patients has always been a major issue for the medical practitioner and pathologist for diagnosis and treatment planning. It is also a fact that some tests may be time-consuming and it gives workloads and difficulty for the pathologists to obtain the accuracy of the presence of the tumor. There are many techniques to detect brain tumors from Magnetic Resonance Images (MRI) images. In this research, we propose machine learning algorithms to overcome the drawbacks of traditional classifiers where the tumor is detected in brain MRI using machine learning algorithms. Machine learning and image classifiers can be used to efficiently detect cancer cells in the brain through MRI .This paper aims to make multi-classification of brain tumors for the early diagnosis purposes using convolution neural network (CNN). Three different CNN models are proposed for three different classification tasks. Brain tumor detection is achieved with 99.33% accuracy using the first CNN model. The second CNN model can classify the brain tumor into five brain tumor types as normal, glioma, meningioma, pituitary and metastatic with an accuracy of 92.66%. The third CNN model can classify the brain tumors into three grades as Grade II, Grade III and Grade IV with an accuracy of 98.14%.

### **Keywords**

Magnetic Resonance Images (MRI), Neural Network, Convolution neural networks (CNN), Classification

## **Early Prediction of Brain Disorders by Machine Learning Classifiers**

**B.Venkataramanaiah**, Electronics & Communication Engineering, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

**V.P.Naveen Kumar Reddy**, Electronics & Communication Engineering, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

**K.Vishnu Vardhan Reddy**, Electronics & Communication Engineering, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

**V.Lakshmi Prasanna Kumar**, Electronics & Communication Engineering, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

### **Abstract**

Medical image like MRI and CT-scan images are the important ways to diagnose disease of human being efficiently. The analysis of tumor based on visual inspection by radiologist/physician is the standard method, which may lead to some wrong classification when a large number of MRI images are to be analyzed. To avoid the human error rate, an automated intelligent classification system is proposed which need for classification of image. Brain tumor is also one of the disease which leads to the death of majority of people around the world. The chances of survival of people can be increased if the tumor is predicted correctly at its early stage. Magnetic resonance imaging (MRI) technique is used for the study of the human brain for finding of diseases. In this project, classification techniques based on Support Vector Machines (SVM) are proposed and implemented to brain image classification, feature extraction from MRI Images will be carried out by DWT. The main aim of this project is to give an better outcome that is higher accuracy rate and lower error rate of MRI brain tumor prediciton using SVM.

## **VLSI Implementation of Lossless ECG Compression Algorithm Using Adaptive Trending Prediction**

**A.Rajani**, Assistant Professor, JNTUK, Andhra Pradesh

**Adabala Sai Sankar**, Student, M.Tech, JNTUK, Andhra Pradesh

### **Abstract**

ECG (electrocardiogram) is a test that measures the electrical activity of the heart. In this paper, an efficient and low power VLSI implementation of compression algorithm has been presented in this concept. To improve the execution, the proposed VLSI design uses bit shifting operations as a replacement for different arithmetic operations. Firstly, ECG compression algorithm comprises two parts: An Adaptive linear prediction technique and Content-Adaptive Golomb -Rice code. Further this project is enhanced by Adaptive trending prediction technique. Predictive coding is a lossless compression technique which allows a compact representation of data by encoding the error between the data itself and information “predicted” from past observations. The prediction techniques build an estimate  $x'(n)$  for a given sample  $x(n)$  of the signal by using the past three samples from the data.

### **Keywords**

ECG(electrocardiogram), VLSI, Golomb Rice code, Adaptive linear prediction, Adaptive trending prediction.

## **Diagnosis of ECG signal for Signal Quality using Convolutional Neural Networks**

**M. Gayathri**, Electronics and Communications, University College of Engineering Autonomous, Kakinada.

**A. Rajani**, Electronics and Communications, University College of Engineering Autonomous, Kakinada.

### **Abstract**

In this paper, we propose a new automated quality aware Electrocardiogram (ECG) beat classification method for effective diagnosis of ECG arrhythmias under unsupervised healthcare environments. The proposed method consists of three major stages: the ECG signal quality assessment (“acceptable” or “unacceptable”) based on our previous modified complete ensemble empirical mode decomposition and temporal features; the ECG signal reconstruction and R-peak detection; and the ECG beat classification including the ECG beat extraction, beat alignment, and normalized cross-correlation-based beat classification. Convolutional Neural network is used for classification and the results are compared with ECG beat classification. Parametric values like accuracy, sensitivity, specificity are evaluated. Matlab is used to perform the experimental results .

The exactness and robustness of the existing method are evaluated using Dissimilar normal and abnormal ECG signals taken from the standard MIT- BIH arrhythmia beat categorization method can significantly achieve false Alarm reduction ranging from 24% to 93% under noisy ECG recordings. The R-peak detector achieves the average Se 99.67% and positive predictivity (Pp) 93.10% and the average sensitivity (Se) 99.65% and Pp 98.88% without and with denoising approaches, correspondingly. Results further showed that the proposed ECG beat extraction approach Can improve the categorization accuracy by using CNN technique for categorization . By using CNN technique the results were better as the R-peak detection achieves in SQA.

## **Awareness of Polycystic Ovarian Syndrome among Females from Urban and Rural Area-A Comparative Analysis**

**Renuka Jakhar**, PhD Scholar, School of Medical and Allied Sciences, G D Goenka University, Gurgaon, Haryana, India

**Elina Dewanji Sen**, Medical Doctor and Associate Professor, School of Medical and Allied Sciences, G D Goenka University, Gurgaon, Haryana, India

**Rohit Dutt**, Associate Dean, School of Medical and Allied Sciences, G D Goenka University, Gurgaon, Haryana, India

### **Abstract**

Polycystic Ovarian Syndrome (PCOS) is a lifelong disease that begins during adolescence and can't be cured. It is a hormonal disorder which results in irregular or absent menses, excess male hormones (androgens) and fluid filled tiny cysts on the ovaries. Raising awareness among young females about the disease is essential for reduction of increasing incidence of PCOS. A survey was conducted in 3 colleges of Gurgaon district to assess awareness level of young females about PCOS in which 428 females filled self completion questionnaires. Questionnaires had 11 questions including signs and symptoms, psychological symptoms of the disease, complications related to it, diagnosis and treatment available for the disease. 18.45% (79/428) of population was urban, 29.20% (125/428) came from sub-urban area and 52.33% (224/428) was rural. 24.05% of urban population had heard about the disease while 16% of sub-urban and 17.41% of rural population had heard about it. 53.16%, 13.92% and 11.39% of urban population whereas 12.8% 7.2% and 12% of sub-urban population and 6.69%, 10.26% and 8.48% of rural population identified weight gain, irregular menses and facial acne respectively as sign and symptoms of PCOS. Although anxiety and depression were marked by 6.32% and 16.45% of urban population; only 4% and 7.2% of sub-urban; 5.80% and 3.57% of rural population marked them as long term psychological complications of PCOS. Diabetes was recognized by 2.53%, 2.4% and 2.23% of urban, sub-urban and rural population respectively while 7.59% urban, 3.2% sub-urban and 5.35% rural population identified ovarian cancer as long term complication of the disease. Physical check up and ultrasound scan were known by 11.39% and 7.59% of urban population respectively followed by 6.25% and 7.14% of rural population while 8% of sub-urban population knew about it. 2.53% of urban population followed by 4% sub-urban and 0.89% rural population were aware about hormone replacement therapy as a treatment. Present data shows there is lack of awareness about the disease among young females as more than half of the urban population (53.16%) could identify only one factor related to the disease, i.e., weight gain. Study also shows females from rural area have much less knowledge as compared to urban females of same age group. There is need to spread awareness about the disease especially in sub-urban and rural areas.

### **Keywords**

Polycystic ovarian syndrome, awareness, hormonal disorder.



## **Indian millennials and gen Z: Attitudes towards Technology, Social Media Usage, and Psychological Health**

**Dimple Kariya**, PhD Research Scholar, Department of Psychology School of Humanities & Social Sciences, Manipal University Jaipur, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur, Rajasthan

**Geetika Tankha**, Prof. & Head, Department of Psychology School of Humanities & Social Sciences, Manipal University Jaipur, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur, Rajasthan

### **Abstract**

The purpose of the present study was to investigate the role of sociodemographic variables on social media usage (SMU), attitudes towards technology, and mental health and the relationship among them. The sample consisted of 300 Indian young adults, of whom there were 150 samples belonging to gen Z, with a mean age of 20 years, and 150 samples belonging to millennials with a mean age of 30 years. The sample was administered the MTUAS Scale, DASS Scale, and information about demographic details. The obtained data were analyzed using ANOVA and Pearson r. The results revealed that both female and male millennials had higher social media usage and a more positive attitude towards it when compared to gen Z. Millennials had better mental health than the Gen Z population. Age and gender interaction effect indicated that males experienced the highest anxiety about being without technology or dependence on technology compared to females. The negative attitude towards social media was low in millennial females and gen Z males compared to their counterparts. A positive relationship was found between anxiety about being without social media and a positive attitude towards social media and depression, anxiety, and stress. Results were discussed, keeping widespread SMU, belief systems, and gender sensitization in mind and not disregarding India's youth responsible for taking the nation ahead.

### **Keywords**

gen Z, Indian youth, mental health, millennials, social media usage, technology addiction

## **In-depth Review of Different Price Optimization Techniques used by Omni-Channel Retailers**

**Amita Garg**, Parul University

**Dr. Rajnish Rakholia**, Parul University

### **Abstract**

Easy access of internet has made the multiple options available to the purchasers which successively motivate the retailers to use Omni-channel features into their businesses. But to survive during these highly competitive market retailers need to keep observing the market and regularly re-price their products consistently with the competitor's strategies. To work out an optimal price in terms of price or revenue earned with the assistance of automated learning base approach may be a challenging task. In this paper, an in-depth review on various techniques used for price optimization in retail segment was done to know strengths and weakness of each method and also to know the suitability of method under specific situation. The study showed that model created using various machine learning algorithms is providing more accurate result. This state of art study is beneficial for the researchers to know the gap between the past researches and to understand the long scope of research.

## **Statistical Analysis on Post Covid-19 Diseases**

**Akhilesh R**, Student, Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

**Sreelatha K.S**, Assistant Professor, Department of Mathematics, Amrita School of Arts and Science, Amrita Vishwa Vidyapeetham, Amritapuri Campus, Kollam

### **Abstract**

COVID – 19 has created havoc in the world by causing thousands of demises in a short period of time. The disease has paralysed the world and causing thousands of mortalities and morbidities worldwide. The worldwide outbreak of corona virus was identified in 2019 in Wuhan, China. Since then, the disease has spread worldwide. Health systems globally are under grave siege with the presence of corona virus pandemic. Corona virus impact has significant impact on Social, economic and public health crisis that led to post Covid-19 diseases. This cram aspires to explore the impact of Post Covid - 19 syndrome in different categories of age group in five different district in Kerala, India. Three hundred sample data collected from different districts. Data analysis has done using various statistical techniques

**A Study on Green Human Resource Management Practices and its effect on Employee Motivation and Organisational Commitment**

**Dr. Nancy Goel**, Assistant Professor, Bharati Vidyapeeth Institute of Management and Research, New Delhi, India

**Abstract**

Green Human Resource Management is a new conception and in fact has a boundless potential to oblige the humanity and industries as a whole. Many Commercial zone where issues related to environment and sustainability have received a prodigious deal of debates and arguments are selection, training, rewards and compensation of human Resource for sustainable businesses. The main aim of this research paper is to explore the relationships between various Green Human Resource Management Practices (Green Training and Development, Green Recruitment and Selection, Green Reward Management, Green Employee Involvement) and organisational commitment and Employee Motivation. Researcher has applied Exploratory Factor Analysis and Structural Equation Modelling in order to explore and examine the relationship amongst the variables that has been found out during reviewing the literature. The outcomes of this empirical research establish that out of four variables only two variables i.e. Green Recruitment and Selection and Green Reward Management were found to be statistically substantial as per results of this research work and these are also the key elements influencing the Employee Motivation and organisational commitment. There is no mediation effect of Employee Motivation was found between Green Recruitment and Selection, Green Reward Management, Green Training and Development, Green Employee Involvement to Organizational Commitment.

## **Survey on Various Secured Authentication Methods in Cloud Computing Environment**

**Komathi K**, ST. Peter's Institute of Higher Education and Research

**Dr. D. Kavitha**, ST. Peter's Institute of Higher Education and Research

### **Abstract**

With increasing elasticity and flexibility, Cloud Computing obtained a huge momentum in recent past. Cloud computing is a prominent technology that is a combination of mobile computing and cloud computing which provides the support for various mobile applications. On the cloud, attackers can exploit vulnerabilities in cloud management, cloud virtualization and cloud access protocols. Recent attacks have shown that personal information can be disclosed, computing tasks can be maliciously altered and cloud services can be disabled for users. The study provides various methods on security mechanisms that is developed to secure the cloud system via encryption and decryption techniques. The models are presented in such a way that it offers increased support to the cloud environment relating to user data and privacy. The methods are obtained from various literatures to provide an overview on how well these methods adopt to cloud systems and its associated limitations. The study also presents the models relating to big data and security on big data storage in cloud environment.

### **Keywords**

Security, Authentication, Cloud Computing, Data Privacy

## **Survey on Various Efficient Framework to Optimize Security Threats in Cloud Computing**

**Divya S**, ST. Peter's Institute of Higher Education and Research

**Dr. D. Kavitha**, ST. Peter's Institute of Higher Education and Research

### **Abstract**

Cloud Computing (CC) offers computing everywhere even at remote locations that tends to provide the resources on demand. The transformation from conventional applications and databases to cloud often poses security threats due to attacks and may not be trustworthy. In this survey, we present the machine learning frameworks involved to reduce the threats or eliminate the threats in CC using cloud security alliances and threat models.

The survey falls under various scope that includes application, data, service and infrastructure that includes the integrity, correctness, availability and confidentiality of data in cloud. The study further presents the security, issues and risks associated with the above scope and the framework to mitigate the cloud vulnerabilities.

### **Keywords**

Security, Attack Models, Cloud, Threats

## **Comprehensive analysis of Mechanical Biological Treatment rejected fraction as a source of RDF**

**Nidhi Chhabra**, Jabalpur Engineering College, Jabalpur, India

**Shailza Verma**, Jabalpur Engineering College, Jabalpur, India

### **Abstract**

Refused Derived Fuel (RDF) could be considered as an alternative energy source that not only aids in waste management but also helps to minimize energy consumption and pollution in large industries. The potential for energy valorization of rejected municipal solid waste (MSW) streams processed in Katni mechanical and biological treatment (MBT) facility is studied in this research. Therefore, various physical and chemical analysis of mechanical treatment rejects (MTR) and composting rejects (CR), were carried out. The results show that MTR has a higher concentration of moisture content as compared to CR. The high percentage of organics in MTR is mainly due to the lack of a source separation system, poor mechanical treatment performance. The CR and MTR moisture content is around the standard range of SCF but there is need for moisture reduction by 10% in order to satisfy the criteria for RDF Grade I. It was found that MTR is better suitable for RDF production however if additional measures are taken then Composting rejects can be used as RDF, then under ideal circumstances 2562.3 tonnes per year of waste can be prevented from going to the Landfill and hence saving the energy of 26.44 million Joules/year. As a result, MTR and CR can be used as sources of RDF production and alternative fuels in the cement industry and thus helping in increasing the TSR in India.

## **Classification of Skin Disease Image using Texture and Color Features**

**M. Kalaiyarivu**, Department of Computer and Information Science, Annamalai University

**Dr.N.J. Nalini**, Department of Computer Science and Engineering, Annamalai University

### **Abstract**

Skin disease is quite one dangerous diseases caused by DNA, which can cause death. This damaged DNA begins to grow is cells without control, and nowadays it multiplies rapidly. There is some research for digitalized analysis of malignancy in skin ulcer images. However, the analysis these images are very challenging as they have some disturbing factors like reflection from the skin surface. Variations in color light, different shapes and sizes of lesions. As result, proofing is automated Recognizing skin disease is valuable for building the accuracy and skill pathologists early on levels. In this paper works to we propose convolutional neural network model derived from Deep Learning and these compared with some kinds of machine learning tools approach to Machine Learning techniques approach for accurate classification among these following seven types of skin diseases(/such as, Akiec,Bcc,Bkl, Mel, Nv, Df). In the preprocessing we first, use image resized and to converted RGB to Grayscale image for retrieve the graylevel features. Secondly , use a filter to eliminate noise and unwanted objects. Finally, normalize the input images and extraction features helps for accurate classification. To calculate our proposed presentation, the CNN model compared to some other Machine Learning models such DT,SVM,KNN,LGBM



## **Self-Paced Learning: A Challenge to Modular Distance Learners in the New Normal Education Setting**

**Marjorie P. Caslib**, Davao del Norte State College, Institute of Education – Graduate School

### **Abstract**

The pandemic has altered the lives and activities of people all across the world in ways that no one could have predicted. The once-in-a-lifetime circumstance presented both problems and opportunities to all segments of the community and society. The essential purpose of this descriptive qualitative phenomenological study is to explore the personal stories of students in modular distance learning using the Self-paced Learning Modules (SLMs). The Researcher sought insights, opinions, and ideas from six (6) low-performing students through a Key Informant Interview. In the light of the lockdown situation, data were gathered through phone and video calls and recorded, transcribed, coded, analyzed, and categorized responses into themes. Five emergent themes generated are as follows (1) Poor reading comprehension level, (2) Lack of alternative learning materials, (3) No strict daily learning routine, (4) No constant communication from parents and teachers for support (5) Unmotivated learning system at home. Findings revealed that the most challenging experiences met by students are the lack of reading comprehension and insufficient learning resources. With these findings, the school administrator and teachers should provide necessary learning strategies and supplementary learning resources to increase learners' performance.

### **Keywords**

Self-paced learning, modular distance, new normal

## **Fantastic Computing Machine (FCM): A paradigm-shifting ML Model Deployment Strategy**

**Aditya Agarwal**, Ex-Student, Alliance College of Engineering and Design, Alliance University, Bangalore, KA

**Nilesh Kumar Mandal**, Ex-Student, Alliance College of Engineering and Design, Alliance University, Bangalore, KA

**Dr. Ramalakshmi K**, Associate Professor, Alliance College of Engineering and Design, Alliance University, Bangalore, KA

### **Abstract**

Developing Machine Learning (ML) model is a difficult task, and then after successfully creating a working model, deploying and distribution is a bonus on the difficulty scale. In most instances, those models are never deployed. To help with this, we present FCM, a SaaS platform to allow users to dynamically deploy their machine learning models to the cloud and host them so that the user has complete control over the visibility and accessibility.

This delivery and deployment model provides lower upfront cost, timely updates, and a dedicated work/host environment. The platform's sole purpose revolves around the idea of a sharable deployed and ready to use Machine Learning Model. It takes advantage of the Continuous Integration and Continuous Delivery archetype facilitated by Kubernetes to dynamically provide custom and updated with the latest libraries docker environment.

### **Index Terms**

Machine learning, Deployment models, docker, Kubernetes, Instances

## **Value Driven Strategy for Responsible Business: The Tesco case, UK**

**Pham Ngoc Thu Trang**, Business Administration Faculty, University of Banking, Vietnam  
and PhD candidate, University of Economics, Vietnam

### **Abstract**

Almost all organizations are nowadays experiencing some types of change and it can be certain that there will be more, not less change in organizations in the future. Strategic transformation refers to the issues about culture, empowerment, business process engineering and total quality. However, other change initiatives are driven by the need for the organization so that the organization has to reposition itself (Balogun, 2001). Strategic change can be used to explain these initiatives since it indicates the actions undertaken by an organization in its pursuit of a competitive advantage and the organization which is undergoing strategic change moves from current operation and posture to an altered state in order to facilitating the achievement of competitive advantage (Sutherland and Canwell, 2004). Responsible business, in turn, is becoming an increasingly popular concept of business especially in Western nations such as USA and UK (Amaeshi et al., 2008). Nowadays, nearly everyone has heard of the concept of CSR and almost all companies have the policies or strategies for implementing parts of CSR because they already understand that the benefits of business are enormous (Aras and Crowther, 2012). Business can acquire competitive advantage and sustainable development in the efficiency of operation, enhancing the relation communication among stakeholders and contribution to society. Thus, corporate social responsibility should be an important factor when undertaking the process of strategic change. In this paper, there will be four sections. Initially, it will introduce the sources of the strategic change and corporate social responsibility based on the previous research. In the second place, the issues, which need to be considered when involve the process in the context of CSR and in relation to strategic change, in term of institution and corpoptates. Thirdly, the description of two different tool management about strategic change management will be attached within its organizational and competitive environment. Finally, there will be organizational analysis of Tesco based on the two tools.

### **Keywords**

Tesco case; culture; responisble business, values; social sustainability; paternalism; UK

**Innovation Oneotourism approach to wine positioning- The  
manifestion of tourism case in Vina Arnaiz, Spain**

**Pham Ngoc Thu Trang**, Business Administration Faculty, University of Banking, Vietnam  
and PhD candiate, University of Economics, Vietnam

**Abstract**

The study consisted the introduction of selected enotourism activities, the indication of organization activies such as cost and prices and organizing details representing economic performance of the company and social effect of the company on society. The marketing and promotion section provided the main information on what kind of program, incentives and activities the company might use to promote the wine tourism at Viña Arnaiz, Spain. The feasibility of the research in turn forecasted investment, cost and revenue of this wine-tourism project. The investment and cost are more related to the willingness of the company to invest on wine tourism; hence, the number was adjusted to match the budget from the company but still feasible for making the business run. The forecast of investment was based on the historical data from the wine route of Spain and in Ribera del Duero as well as the expectation and forecast from the company as well as the intern himself. Then, the study demonstrated contents as well as some key learning points form the apprenticeship.

**Keywords**

Oneotourism, wine positioning, authencity, Spain, manifestation of tourism.

## **Image Processing System for disease prediction (AI in health care)**

**Dr Adilakshamma T**, Associate Professor, Silicon City College, Bengaluru, Karnataka

**Bharani Lokesh T**, Technical Lead, TCS, Bengaluru, Karnataka

### **Abstract**

Artificial Intelligence (AI) is one of the emerging fields in healthcare. It is best fit for prediction modelling. In medical field one proverb is there, that prevention is better than cure, which can be best justified by the application of Artificial Intelligence. AI is basically a data driven model to converge to good results. Image processing is a well proven technique to identify different diseases for human. Different types of medical images from various sources are available. There exist strong image processing algorithms to identify diseases. Now, in the recent research AI is added with image processing and based on abnormality and existing database, prior hand disease can be detected. There are several tools as well as algorithms are available to process medical images and finally prediction model can be generated with the help of advanced AI model. The current work dealt with several medical image processing system for abnormality detection for disease prediction in association with artificial intelligence modelling.

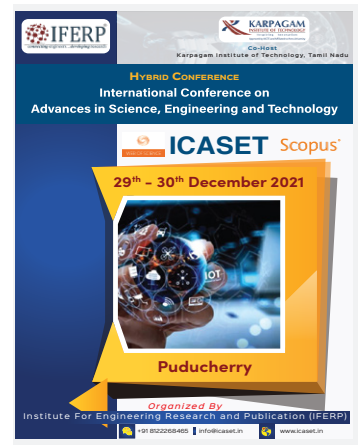
### **Key Words**

Artificial Intelligence, Image Processing, Disease prediction, Healthcare, Abnormality detection



**IFERP International Conference**  
**IFERP Explore**  
<https://icmiar.net/> | [info@icmiar.net](mailto:info@icmiar.net)

**UPCOMING CONFERENCES**



**Echnoarete**<sup>®</sup> Group

Integrating Researchers to Incubate Innovation

**SUPPORTED BY**

