

# 2<sup>nd</sup> International Conference on Recent Advances in Engineering and Computer Applications (2<sup>nd</sup> ICRAECA – 2025)

Organized by LJ School of Computer Applications, LJ University, Shinawatra University, Thailand in association with IFERP Academy

## **Post Conference Report**

2<sup>nd</sup> ICRAECA – 2025, Contributed to Following SDGs



#### Foreword

Dear Participants,

It gives me immense pleasure to share with you the outcomes and results of the 2nd ICRAECA – 2025, with the theme of "Recent Advances in Technology " which was held at LJ University, India on 24<sup>th</sup> and 25<sup>th</sup> January, 2025. More than 200 people attended the event in person, and more than 300 people watched the live stream online. We were able to actively engage and reach out to a wider spectrum of research communities.



Technoarete Group

The 2nd International Conference on Recent Advances in Engineering and Computer Applications (2<sup>nd</sup> ICRAECA – 2025), provided a vibrant platform that brings together scholars, educators, and researchers from a variety of disciplines. It is a hub for exchanging innovative research about Recent trends in education, Recent trends in AI/ML, Recent trends in cloud, fog and edge computing, Recent trends in block chain, IoT Applications, Recent trends in E-governance, IPR, Cybersecurity & Law, Communication, networking, signal processing, image processing, RF circuits/systems and antennas, Robotics control, instrumentation and automation, civil engineering, mechanical engineering etc that foster critical and creative thinking, mainly in the educational research, and fostering multidisciplinary exchanges among experts in education, science, engineering & technology, social science & humanities, and management.

We are grateful for the support of LJ University and Shinawatra University, Thailand, whose contributions were vital to the success of this conference. We extend our sincere gratitude and highest respect to the professors who played an important role in the review process, providing valuable feedback and suggestions to authors to improve their work. We also extend our appreciation to the external reviewers for providing additional support in the review process and to the authors for contributing their research results to the 2nd International Conference on Recent Advances in Engineering and Computer Applications ( $2^{nd}$  ICRAECA – 2025)

Mr. Siddth Kumar Chhajer MD & Founder, IFERP Technoarete Group

## **Table of Contents**

## 1. Conference Summary

- 1.1 Conference Overview
- 1.2 Conference Theme
- 1.3 Objectives & Scope of the Conference

## 2. Keynote Speakers, Session Speakers, & Session Chairs

## 3. Welcoming & Introduction

## 4. Keynote Speeches

- 4.1 Keynote Speech by Prof. Dr. Sayan Kumar Ray
- 4.2 Keynote Speech by Dr. Kiran Trivedi

## 5. Group Photo

- 6. Inaugural Programme
- 7. Conference Proceedings Book Release
- 8. Momento Ceremony
- 9. Technical Presentation Sessions I
  - 9.1 Technical Presentation Session 1

9.1.1 – 9.1.8 Scientific Presentations

## 9.2 Technical Presentation Session 2

9.2.1 - 9.2.9 Scientific Presentations

## 9.3 Technical Presentation Session 3

9.3.1 - 9.3.8 Scientific Presentations

## 9.4 Technical Presentation Session 4

9.4.1 - 9.4.8 Scientific Presentations

## 9.5 Technical Presentation Session 5

9.5.1 - 9.5.8 Scientific Presentations

## 9.6 Technical Presentation Session 6

9.6.1 - 9.6.8 Scientific Presentations

## 9.7 Technical Presentation Session 7

9.7.1 - 9.7.8 Scientific Presentations

## 9.8 Technical Presentation Session 8

9.8.1 – 9.8.8 Scientific Presentations

## 9.9 Technical Presentation Session 9

9.9.1 – 9.9.8 Scientific Presentations

#### **10. Technical Presentation Sessions II**

#### **10.1 Technical Presentation Session 1**

10.1.1 - 10.1.6 Scientific Presentations

#### **10.2** Technical Presentation Session 2

10.2.1 - 10.2.6 Scientific Presentations

#### 10.3 Technical Presentation Session 3

10.3.1 - 10.3.5 Scientific Presentations

#### **10.4 Technical Presentation Session 4**

10.4.1 - 10.4.6 Scientific Presentations

**10.5** Technical Presentation Session 5

10.5.1 - 10.5.6 Scientific Presentations

**10.6 Technical Presentation Session 6** 

10.6.1 - 10.6.6 Scientific Presentations

10.7 Technical Presentation Session 7

10.7.1 - 10.7.6 Scientific Presentations

**10.8 Technical Presentation Session 8** 

10.8.1 - 10.8.6 Scientific Presentations

#### 10.9 Technical Presentation Session 9

10.9.1 - 10.9.6 Scientific Presentations

### **11.Award Ceremony - Best Paper Presentation Awards**

- **12. Valedictory Function**
- 13. Vote of Thanks
- **14. Conference Glimpses**
- 15. General Comments & Feedbacks

## 1. Conference Summary



<b>Conference Name</b>	: 2 <sup>nd</sup> International Conference on Recent Advances in Engineering and	
	<b>Computer Applicati</b>	ons (2 <sup>nd</sup> ICRAECA – 2025)
Date	: 24 <sup>th</sup> & 25 <sup>th</sup> January, 2025	
Venue	: LJ University, India	
<b>Conference Theme</b>	e : Recent Advances in Technology	
Organized By : LJ University, India, Shinawatra University, Thailand and		
	IFERP Academy	
No. of Organizing Committee Members		: 82
No. of Editors/Reviewers		: 12
No. of Speakers		: 5
No. of Abstracts Received		: 429
No. of Participants Registered		: 200
No. of Attendees		: 174

#### **1.1 Conference Overview**

2<sup>nd</sup> International Conference on Recent Advances in Engineering and Computer Applications (2<sup>nd</sup> ICRAECA – 2025) was the place where ideas collided and innovations take the spotlight for the contribution towards achieving Sustainable Development Goals! 2nd ICRAECA – 2025 had long been the meeting place for professionals, educators, researchers, policymakers, and industry professionals looking to network, share ideas, and grow in their respective fields. At this Multi-Disciplinary Research conference in LJ University, India, professionals, academics, researchers, and educators were came together to share their groundbreaking research, and different views, and explore unique ideas from various fields.

Through collaboration, the conference explored intersections between various disciplines and created a dynamic environment to enhance educational discussions and explore diverse studies. This International Conference in LJ University, India was a part of shaping the future of global education. They continued to inspire, transform, and shape education together. Their participation was more than just an RSVP; it is an important role in our community dedicated to academic success and positive change.

#### **1.2 Conference Theme**

The theme of the  $2^{nd}$  International Conference on Recent Advances in Engineering and Computer Applications ( $2^{nd}$  ICRAECA – 2025) " **Recent Advances in Technology** " was to provide a lively space where different academic areas come together.  $2^{nd}$  ICRAECA – 2025 stands as a melting pot of ideas, where the boundaries between advances in engineering, technology, and computer applications disciplines blur, giving rise to innovative solutions that address global challenges. The conference embraces the multidisciplinary nature of educational excellence driving through recent trends in multi-disciplinary research, recognizing that true breakthroughs often occur at the intersections of different fields.

This theme encapsulates the conference's focus on fostering innovation and collaboration across diverse disciplines within engineering, technology, and computer applications disciplines. It encourages participants to explore and present cutting-edge solutions that contribute to the sustainable development of industries, addressing challenges and advancing knowledge for a better future. The multidisciplinary perspective highlights the interconnectedness of various fields in creating holistic and impactful solutions.

## 1.3 Objectives & Scope of the Conference

The  $2^{nd}$  International Conference on Recent Advances in Engineering and Computer Applications ( $2^{nd}$  ICRAECA – 2025) aims to bring together academics, researchers, industry professionals, and students from diverse fields to explore cutting-edge advancements and trends across engineering & technology, and computer applications.

#### Key objectives include:

**Knowledge Sharing:** Facilitate the dissemination of original research, new innovations, and ideas among participants from various fields of engineering and computer applications.

**Networking Opportunities:** Bring together leading academic scientists, researchers, and scholars to foster collaborations and discussions on emerging technologies and trends.

**Professional Development:** Provide a forum for participants to engage in keynote speeches, panel discussions, and works

 $2^{nd}$  ICRAECA – 2025 transcends traditional boundaries, providing a platform for comprehensive exploration across a multitude of disciplines. The conference encompasses a wide scope that includes, but is not limited to:

- **Recent Trends in Education:** Exploring modern educational methodologies and technologies.
- **Recent Trends in AI/ML:** Discussing advancements in Artificial Intelligence and Machine Learning.
- Recent Trends in Cloud, Fog, and Edge Computing: Examining developments in distributed computing paradigms.
- **Recent Trends in Blockchain:** Analyzing innovations and applications of blockchain technology.
- **IoT Applications:** Investigating the integration and impact of the Internet of Things in various sectors.
- **Recent Trends in E-Governance, IPR, Cyber Security & Law:** Addressing issues related to electronic governance, intellectual property rights, cybersecurity, and legal frameworks.
- Communication, Networking, Signal Processing, Image Processing, RF Circuits/Systems, and Antennas: Delving into advancements in communication technologies and related fields.
- Robotics, Control, Instrumentation, and Automation: Focusing on innovations in automation and control systems.

- **Civil Engineering:** Covering recent developments and research in civil infrastructure and construction.
- Mechanical Engineering: Discussing progress in mechanical systems and engineering practices.
- Leveraging Engineering, AI, Data Science, and Analytics for Sustainable Growth: Exploring how these technologies can balance economy, environment, and equity.
- **Data-Driven Insights:** Utilizing educational statistics to transform and improve education systems.

The 2<sup>nd</sup> ICRAECA – 2025 aims to promote multidisciplinary research and collaboration to address contemporary challenges and inspire actionable solutions that contribute to the advancement of engineering & technology, and computer applications globally.

## 2. Keynote Speakers, Session Speakers, & Session Chairs

## **Session Speakers**



Prof. Dr. Sayan Kumar Ray Head of School of Computer Science Taylor's University Malaysia.



Dr. Kiran Trivedi

Engineering and Information Science, University of Wollongong Australia- India.

## 3. Welcoming & Introduction

Welcome to the 2<sup>nd</sup> International Conference on Recent Advances in Engineering and Computer Applications ( $2^{nd}$  ICRAECA – 2025), where we gather the brightest minds and the most innovative ideas to inspire, educate, and connect. Before we dive into today's agenda, let's take a moment to appreciate the vibrant atmosphere here at LJ University, Ahmedabad, India. This location has been thoughtfully chosen to provide an inspiring environment for our discussions and networking. The theme of the 2<sup>nd</sup> International Conference on Recent Advances in Engineering and Computer Applications (2<sup>nd</sup> ICRAECA – 2025) is "Recent Advances in Technology ". Our objective is to explore new technologies in Recent trends in education, Recent trends in AI/ML, Recent trends in cloud, fog and edge computing, Recent trends in block chain, IoT Applications, Recent trends in E-governance, IPR, Cybersecurity & Law, Communication, networking, signal processing, image processing, RF circuits/systems and antennas, Robotics control, instrumentation and automation, civil engineering, mechanical engineering, discuss emerging trends, foster collaboration, etc. Over the next two days, we have a packed schedule with eighteen sessions, and five keynote presentations from industry leaders and experts. This conference would not be possible without the hard work and dedication of many individuals. We would like to extend a special thank you to our conference managers, and organizing committee members.

## 4. Keynote Speeches

4.1 Speech by Keynote speaker - Prof. Dr. Sayan Kumar Ray



Prof. Dr. Sayan Kumar Ray Head of School of Computer Science Taylor's University Malaysia.

### 4.2 Speech by Keynote speaker - Prof. Dr. Sayan Kumar Ray



Dr. Kiran Trivedi Engineering and Information Science, University of Wollongong Australia- India.

## 5. Group Photo



## 6. Inaugural Programme

The inaugural program of the 2<sup>nd</sup> International Conference on Recent Advances in Engineering and Computer Applications (2<sup>nd</sup> ICRAECA – 2025), LJ University, India on 25<sup>th</sup> & 26<sup>th</sup> January, 2025 conference sets the tone for the entire event, providing an opportunity to introduce the theme, objectives, and key participants. The inaugural program included inaugural addresses, proceedings release, Momento ceremony & Institutional Membership Benefits etc. The inaugural program was a crucial part of the conference, serving to welcome and engage participants, set the context for discussions, and recognize the contributions of key individuals.

## 7. Conference Proceedings Book Release

The 2<sup>nd</sup> International Conference on Recent Advances in Engineering and Computer Applications (2<sup>nd</sup> ICRAECA – 2025) Conference proceedings was a comprehensive collection of the papers presented at the 2<sup>nd</sup> ICRAECA – 2025. The Conference Proceedings serve as a valuable record of the research and discussions that occurred during the 2<sup>nd</sup> ICRAECA – 2025 conference, providing insights into Recent trends in education, Recent trends in AI/ML, Recent trends in cloud, fog and edge computing, Recent trends in block chain, IoT Applications, Recent trends in E-governance, IPR, Cybersecurity & Law, Communication, networking, signal processing, image processing, RF circuits/systems and antennas, Robotics control, instrumentation and automation, civil engineering, mechanical engineering.

On behalf of the organizing committee of the  $2^{nd}$  International Conference on Recent Advances in Engineering and Computer Applications ( $2^{nd}$  ICRAECA – 2025) the conference proceedings was released.





https://www.iferp.in/past-conferences.php

## 8. Momento Ceremony

The conference speakers, session speakers, & session chairs were awarded with Momentos.





### 9. Technical Presentation Sessions I

#### 9.1 Technical Presentation Session 1

9.1.1 – 9.1.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 1

#### 9.2 Technical Presentation Session 2

9.2.1 - 9.2.9 Total 9 Scientific Presentations were presented in the Technical Presentation Session 2

#### 9.3 Technical Presentation Session 3

9.3.1 - 9.3.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 3

#### 9.4 Technical Presentation Session 4

9.4.1 - 9.4.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 4

#### 9.5 Technical Presentation Session 5

9.5.1 - 9.5.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 5

## 9.6 Technical Presentation Session 6

9.6.1 - 9.6.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 6

#### 9.7 Technical Presentation Session 7

9.7.1 - 9.7.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 7

#### 9.8 Technical Presentation Session 8

9.8.1 - 9.8.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 8

#### 9.9 Technical Presentation Session 9

9.9.1 - 9.9.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 9

### **10.**Technical Presentation Sessions II

#### **10.1 Technical Presentation Session 1**

10.1.1 – 10.1.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 1

#### **10.2 Technical Presentation Session 2**

10.2.1 – 10.2.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 2

#### **10.3 Technical Presentation Session 3**

10.3.1 - 10.3.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 3

#### **10.4 Technical Presentation Session 4**

10.4.1 - 10.4.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 4

#### **10.5 Technical Presentation Session 5**

10.5.1 - 10.5.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 5

#### **10.6 Technical Presentation Session 6**

10.6.1 - 10.6.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 6

#### **10.7 Technical Presentation Session 7**

10.7.1 - 10.7.8 Total 8 Scientific Presentations were presented in

**Technical Presentation Session 7** 

#### **10.8 Technical Presentation Session 8**

10.8.1 - 10.8.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 8

#### **10.9 Technical Presentation Session 9**

10.9.1 - 10.9.8 Total 8 Scientific Presentations were presented in the Technical Presentation Session 9

## 11. Award Ceremony - Best Paper Presentation Awards

#### S:NO **Paper Title** Name Study of PVD coatings in combination with Fabio Ferreira, smart polymeric additives for enhanced wear 1. Instituto Pedro Nunes Portugal resistance and friction reduction **Characterization and Analysis of Tension** Ma. Lalaine Nicole L. Parallel Properties in Bambusa blumeana A 2. Resurreccion. Study of Bamboo's Mechanical Strength for Mapua University Philippines Structural Application Development and Assessment of TrAcad: **Prince Mert O Nicolas** Smart Student Tracking using Simple Boolean 3 Nueva Ecija University of Science and Technology Philippines and Conditional Algorithm Forecasting Water Shortages in Agricultural Gedion C Ulban Jr 4. Benguet State University Irrigation in La Trinidad, Benguet Through Philippines **Predictive Analysis** Enhancing Food Security Innovation Health Glena L Caluza 5. and Wellness in Adapting to Climate Change A Liceo de Cagayan University Philippines basis for an Intervention Program Ellen Flores Mangaoang Analysis of Deep Learning Algorithms for 6. University of the Cordilleras Grape Leaf Disease Detection Philippines Adaptive Scheduling Heuristic Priority Linear Regression (ASH-PLR): A Novel CPU Don Harl MalabananUniversity 7. Scheduling Algorithm using Predictive of the Cordilleras Philippines **Priority Levels M** Gayathri **Ontology-Guided Exploration for Indian** 8 **Rajalakshmi Engineering College Traditional Medicine Systems** India A Machine Learning Approach for Anu Thomas 9. Personalized Course Recommendation Lok Jagruti Kendra University India Systems for Learners Yash Kulkarni Diabetic Retinopathy Classification using CNN 10. SRM Institute of Science and Technology, India

#### **Best Paper Presentation Awards**

## **12. Valedictory Function**

#### 12.1 Conference - Conclusion Summary

The 2<sup>nd</sup> International Conference on Recent Advances in Engineering and Computer Applications (2<sup>nd</sup> ICRAECA – 2025), held on 25<sup>th</sup> & 26<sup>th</sup> January, 2024, at LJ University, India, organized by LJ University, India, Shinawatra University, Thailand, and IFERP Academy brought together a diverse group of experts, practitioners, and enthusiasts from various fields. The central theme of the conference was " Recent Advances in Technology " and it successfully fostered a collaborative environment for sharing knowledge, insights, and advancements to achieve SDGs.

#### **Key Highlights:**

The conference commenced with an inspiring Special Guest of Speech and Keynote Speakers highlighted the recent breakthroughs and the potential for future developments in engineering, science & technology, computer applications and multidisciplinary areas.

#### **Research Presentations:**

Over 200 research papers were presented, covering a wide range of topics. These presentations showcased cutting-edge research and fostered lively discussions.

#### **Networking Opportunities:**

The conference facilitated numerous networking events, allowing attendees to connect with peers, potential collaborators, and industry leaders. The virtual and in-person networking sessions were particularly well-received, enhancing professional relationships and sparking new partnerships.

#### Achievements and Outcomes:

- Several new collaborative initiatives were announced, aiming to address global challenges. These initiatives will leverage the collective expertise and resources of participating organizations.
- Publication of Proceedings including the conference proceedings, including research papers and keynote addresses, will be published. Future Conferences: Plans for the next conference were discussed, with suggestions for topics and formats that could further enhance engagement and impact.

#### **Closing Remarks:**

In the closing session, IFERP Academy expressed its gratitude to all the participants, academic partners, sponsors, and organizers. IFERP Academy highlighted the conference's success in achieving its objectives and underscored the importance of continued collaboration and innovation. Attendees left with a sense of accomplishment and a renewed commitment to advancing in their fields.

The conference concluded on a high note, with participants energized and motivated to apply the insights gained to their respective fields. The event not only celebrated current achievements but also set a forward-looking agenda for future research and development.

#### 13. Vote of Thanks

Dear Researchers, Academicians & Students,

As we draw to the close of this remarkable  $2^{nd}$  International Conference on Recent Advances in Engineering and Computer Applications ( $2^{nd}$  ICRAECA – 2025) it is our honor and privilege to extend a vote of thanks on behalf of the organizing committee. Today has been a day filled with insights, inspiration, and invaluable networking opportunities, and none of this would have been possible without the collective efforts of many individuals and organizations.

Firstly, we would like to express our deepest gratitude to our esteemed speakers. Your expertise, thoughtful presentations, and engaging discussions have been the highlight of this conference. You have not only enlightened us with new knowledge but have also inspired us to think critically and creatively about the challenges and opportunities in our field.

A special thanks to our dedicated organizing committee and volunteers. Your hard work behind the scenes, meticulous planning, and tireless efforts have ensured that everything ran smoothly. Your passion and dedication are truly commendable, and this event could not have happened without you.

We are also grateful to our attendees. Your active participation, thoughtful questions, and enthusiastic engagement have added great value to this conference. It is your eagerness to learn and share that makes the events like this so rewarding and worthwhile.

We would like to acknowledge the venue staff for their excellent service and hospitality, providing us with a comfortable and conducive environment for our discussions and networking.

Finally, I want to thank everyone who has contributed, in big ways and small, to the success of this conference. Whether you were a speaker, sponsor, attendee, or volunteer, your involvement has been crucial.

As we conclude, let us take with us the knowledge we have gained, the connections we have made, and the inspiration to drive forward in our respective fields. We look forward to seeing you at future conferences and continuing these valuable conversations.

## **14. Conference Glimpses**









## **15. General Comments & Feedbacks**

## **Overall Comments of the Participants:**

- Organizing and Coordination of the conference was excellent and professional.
- Speakers were no doubt enriching.
- Overall, an excellent International Conference.
- The introduction of the conference program was so effective that it distracts you from the research topic
- Webinars, Panel discussions & workshops need to be added in the conference
- Keynote speakers talks were worth listening.
- Issues were resolved carefully.