

DUK/NL/VOL:4/ISS.12/DEC.2025

# DUK NEWSLETTER

## DECEMBER 2025

**KERALA UNIVERSITY OF DIGITAL SCIENCES,  
INNOVATION AND TECHNOLOGY  
(DIGITAL UNIVERSITY KERALA)**

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*To lead us in innovation.....*

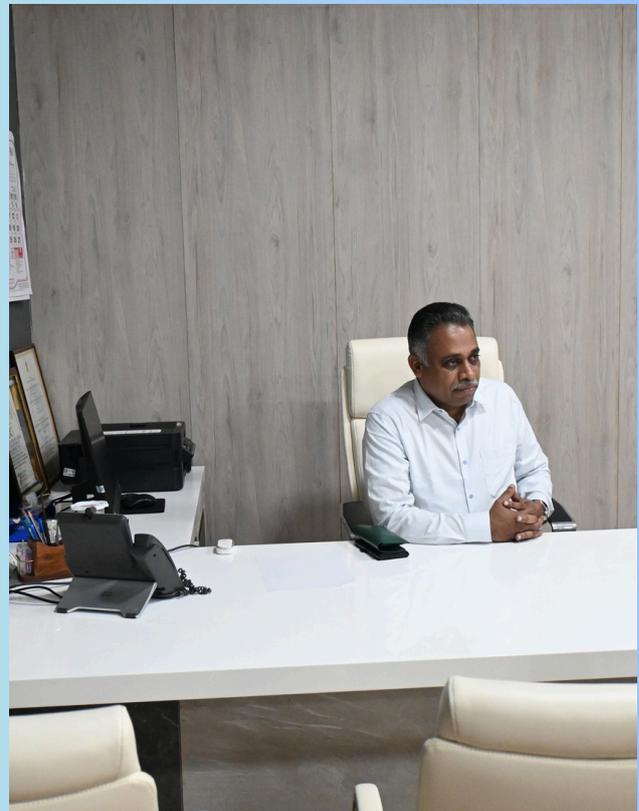
## Prof. Saji Gopinath joins as Vice Chancellor of DUK

Prof. Saji Gopinath joined as the Vice Chancellor of Digital University Kerala on 24th December 2025.

The presence of Prof. Saji Gopinath marks a moment of pride, confidence, and renewed inspiration for the entire DUK community. His visionary leadership has always guided the university towards innovation, academic excellence, and a culture of continuous growth. His assumption of the position strengthens our collective mission and reinforces our commitment to nurturing talent, fostering research, and leading impactful initiatives that shape the future of digital learning and development.



Welcome back, sir—DUK is proud to have you with us once again.

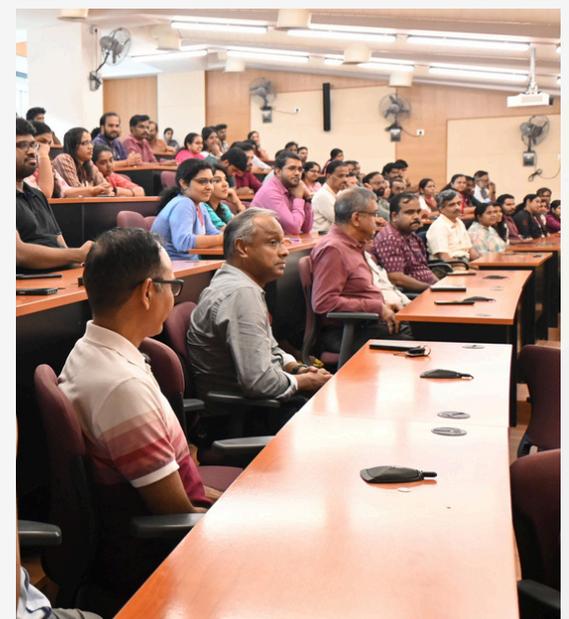


## Christmas Celebrations at DUK

The Christmas celebration of DUK was held on 24th December 2025, bringing together DUK community in a spirit of joy, gratitude, and festive cheer.

The event opened with a warm gathering of colleagues, followed by a delightful cake-cutting ceremony graced by the Hon'ble Vice Chancellor, Prof. Saji Gopinath, Dr. A Mujeeb, Registrar, and Prof. Jaishanker, Dean (Academic).

The celebration was filled with smiles, togetherness, and the true spirit of Christmas, making the occasion vibrant, memorable, and meaningful for all who attended.



## Farewell Ceremony of the Former Vice Chancellor of DUK

The Farewell Ceremony of the Hon'ble Vice Chancellor, Dr. Ciza Thomas, was held on 23rd December 2025 to express sincere gratitude and appreciation for her tenure at DUK.



## Christmas Celebration at IITM-K (Organised by PGDCS)

The PGDCS students organised a joyful Christmas celebration at IITMK on 23rd December 2025. The event was marked by a vibrant festive spirit and enthusiastic participation from the students.

The celebration featured a variety of cultural programmes and interactive activities, including songs, dance performances, games, and Christmas experience-sharing sessions. These activities created a lively and engaging atmosphere throughout the programme.

Members of the KSAAC team actively participated in the event, contributing significantly to its success and overall vibrancy. The function was formally inaugurated by the KSAAC team, followed by a cake-cutting ceremony, symbolising togetherness, joy, and the spirit of the season. Overall, the event was a memorable occasion that showcased teamwork, creativity, and cultural harmony, truly reflecting the essence and spirit of Christmas.



## Researcher Featured Among Top 5 Innovations at Malaysia’s Design for Plastics Circularity Challenge 2025

Mr. Dawn Sivan, a researcher affiliated with Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia, and currently on research attachment with Digital University Kerala, was featured among the Top 5 innovations at the Design for Plastics Circularity Challenge (DPCC) 2025, a national-level innovation programme in Malaysia organized by the Malaysian Plastics Manufacturers Association (MPMA) in collaboration with Dow Chemicals, Malaysia. The DPCC 2025 aims to foster innovative and sustainable solutions for plastics circularity by engaging university researchers and students with industry stakeholders across the plastics value chain. The competition attracted participation from higher education institutions across Malaysia and progressed through multiple evaluation stages, including abstract screening, an industrial bootcamp, mentorship sessions and a final pitching round.

The shortlisted innovation, titled “AI-Enabled Smart Circularity Advisor: A Retrieval-Augmented Platform for Plastics Recycling and Upcycling,” applies artificial intelligence to support decision-making in plastics recycling and upcycling. The platform integrates structured scientific knowledge with data-driven retrieval techniques to assist recyclers, manufacturers, and researchers in identifying suitable recycling pathways, material alternatives, and process optimization strategies aligned with circular economy principles. After advancing through the Top 30 and Top 15 stages, the project was selected among the Top 5 innovations presented at the DPCC 2025 Grand Finale, held on 12 November 2025 at Open University Malaysia, Petaling Jaya, Selangor, Malaysia. The final evaluation was conducted by a panel comprising industry leaders, sustainability experts, and representatives from the plastics manufacturing and recycling sectors.



The work was carried out under the academic guidance of Prof. Jose Rajan (Chair Professor, Battery Research Center of Green Energy, Ming Chi University of Technology, Taiwan, and Full Professor, Centre for Advanced Intelligent Materials, Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia), with additional scholarly mentorship from Prof. Satheesh Kumar and Prof. Manoj Kumar from Digital University Kerala. International research guidance was provided by Prof. Yen-Jen Chen (Ming Chi University of Technology, Taiwan) and Dr. Kohbalan Moorthy (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia).



This recognition highlights the growing importance of AI-driven, data-centric approaches in addressing real-world challenges related to plastics sustainability and circularity. It also reflects the value of cross-institutional collaboration between Malaysian and Indian academic ecosystems in advancing applied research with industrial relevance.

## Smart India Hackathon National Level Grand Finale Participation

As a result of the innovation culture fostered by DUKInnofest '25, organized by the Innovation Club, Digital University Kerala, the university achieved a historic milestone as two teams secured positions among the Top 5 national finalists out of over 200 submissions at the Smart India Hackathon (SIH) 2025 Grand Finale. Competing in this prestigious 36-hour national-level event, organized by the Ministry of Education and AICTE, the teams addressed critical challenges at the intersection of technology and national development.

Team Nexacore, comprising Arshed Shan T P, Suhana S S, Ibrahim A R, Amina Nizam N, Aravind G, and Aayisha A Kabir, represented the university at Kolhapur Institute of Technology, Maharashtra. Under the guidance of Innovation Officer Sarath S M, the team developed “Palm Mitra,” a digital decision-support platform for the Ministry of Agriculture and Farmers Welfare, aimed at early risk mitigation for oil palm farmers.

Simultaneously, Team BlueDepth, featuring Muhammed Niyas, Emerson Elgin Fernandez, Amal Madhu, Aswathi AS, Bhoomija M, and Sreeprabha SP, competed at Nagarjuna College of Engineering & Technology, guided by R&D Engineer Muhammed Faris Mukthar M V, the team delivered an advanced Machine Learning solution for Underwater image enhancement, addressing a problem statement under the Ministry of Defence and DRDO.

This dual success highlights Digital University Kerala's growing leadership in solving critical national challenges through advanced technology, research excellence, and human-centric innovation.





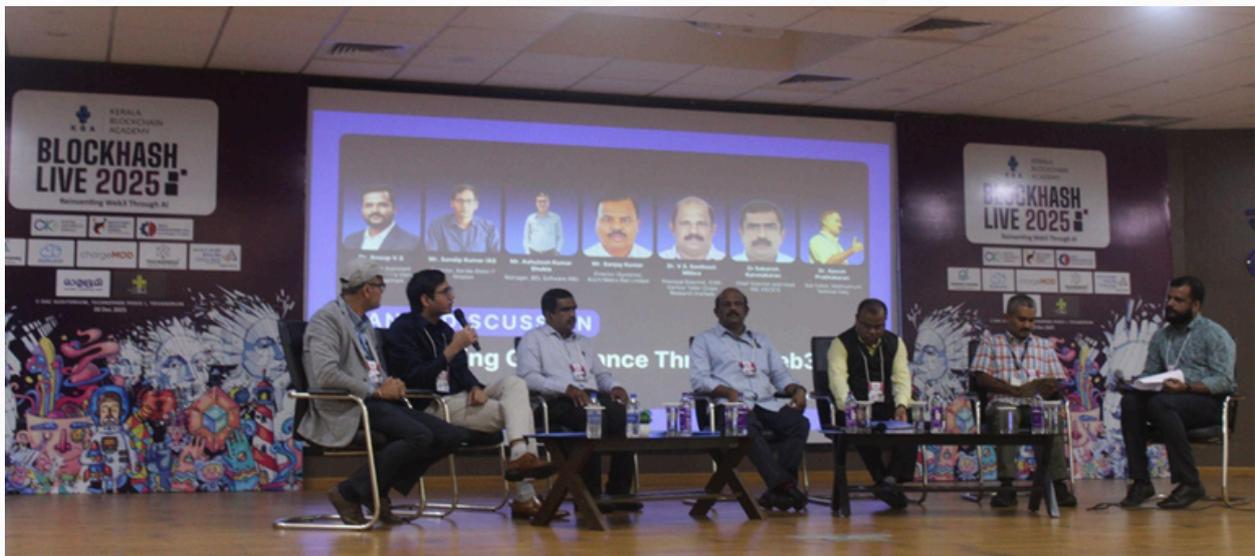
## DUK Team visited the 21st ICISS Conference at IIT Indore

Dr. Preetam Mukherjee (Assistant Professor), Ms. Lakshmi R Nair (PhD Scholar) and Ms. Smitha Rani B S (PhD Scholar) visited IIT Indore regarding the 21st International Conference on Information Systems Security (ICISS 2025), 16th - 20th December 2025.



## BlockHash LIVE 2025 Showcases Kerala's Tech Future Through Web3-AI Convergence

BlockHash LIVE 2025 successfully concluded on December 20 at the C-DAC Auditorium, Technopark, spotlighting Kerala's growing leadership in web3 and AI-driven innovation. The theme "Reinventing Web3 Through AI" of the annual summit hosted deep innovative conversations on the future digital systems. Organised by the Kerala Blockchain Academy, the one-day summit brought around 200 participants, including students, academicians, national and international experts, startup leaders, policymakers, and government representatives, reinforcing Kerala's position on the global digital innovation map.



The programme featured insightful tech talks, panel discussions, and business networking sessions exploring real-world applications of blockchain and AI across governance and industry, Web3-led transformation, and emerging startup opportunities. Lively audience engagement and interactive Q&A sessions stood out as key highlights. The summit was inaugurated by Sandip Kumar IAS, Director, IT Mission, underscoring Kerala's role in Digital India's blockchain-powered AI transition. Welcome and inaugural addresses were delivered by Dr. Ashraf S and Dr. A. Mujeeb respectively, followed by a felicitation address by Avira Tharakan. Expert panels featured voices from Bharat Electronics Limited, IBM, Alliance, Kochi Metro, and Mathrubhumi, adding depth and diversity to the discourse.



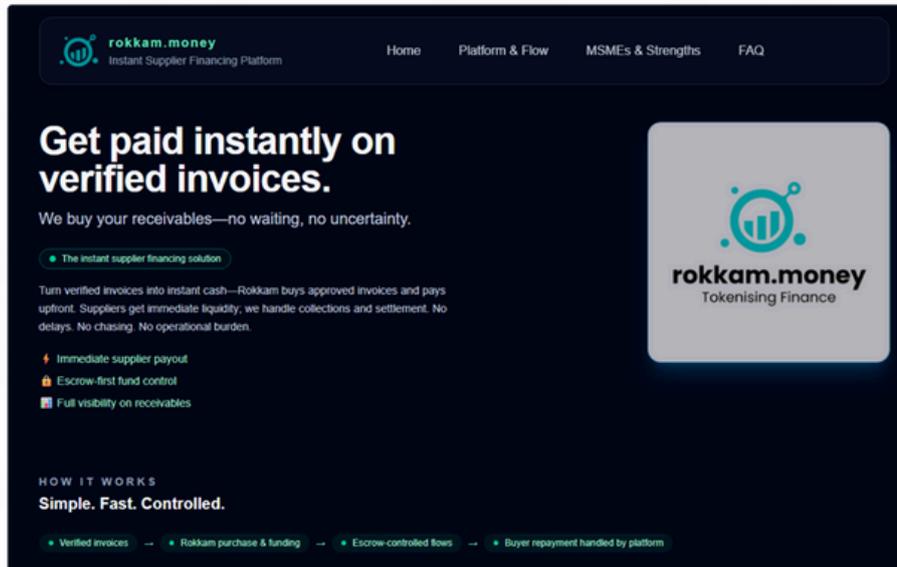


Dijitaru, ChargeMod, and TrackGenesis joined as partners, with Canara Bank as the Banking Partner, and Mathrubhumi and Club FM 94.3 as Media Partners. The event also marked the launch of Rokkam Money and Ignite in the presence of dignitaries. With high-quality discussions and strong networking, BlockHash LIVE 2025 emerged as a defining platform that amplified Kerala's tech future on the global stage-powered by the convergence of Web3 and AI.

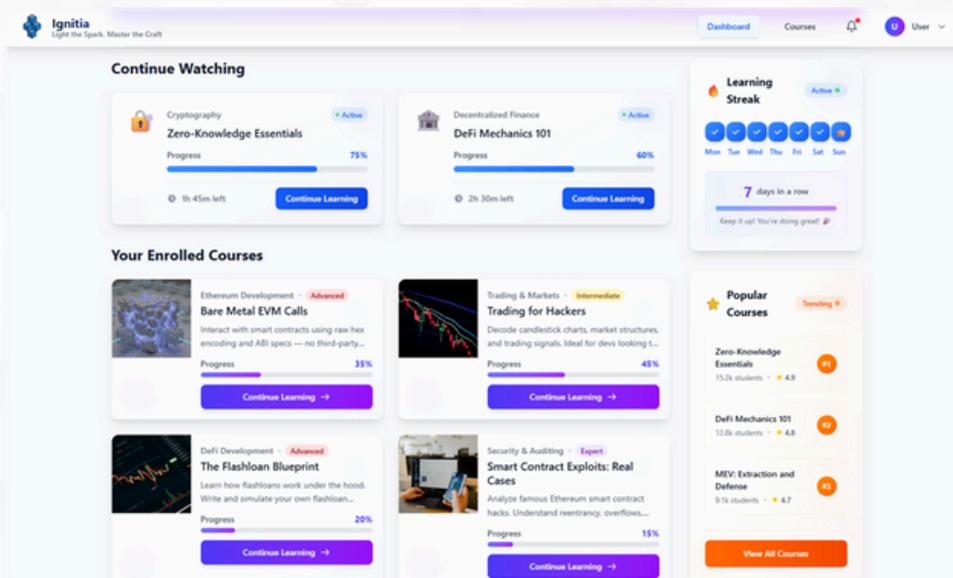
## Innovation in Action at BlockHash LIVE 2025: Launch of Rokkam Money and Ignite



At BlockHash LIVE 2025, Kerala Blockchain Academy marked a major milestone with the successful launch of two innovative platforms, Rokkam Money and Ignite, demonstrating its commitment to translating emerging technologies into real-world impact.



Rokkam Money (rokkam.money) is an instant financing platform purpose-built for receivable invoices. Once an invoice is approved, the platform purchases the receivable amount and pays suppliers upfront, enabling early exit and improved liquidity. Rokkam Money then manages the remaining lifecycle of the receivable, significantly reducing operational overhead for suppliers. The platform is being developed with a strong focus on tokenising receivables to enable seamless and instant supplier financing, in collaboration with Dejitaru Technology.



Ignite is a next-generation learning platform developed by the KBA Lab to deliver short, focused, and purposeful knowledge content. Going beyond traditional learning models, Ignite provides access to a curated ecosystem of tools that support real-world application, experimentation, and professional growth. At its core, Ignite positions learning as a launchpad for infinite possibilities rather than a constraint. The platform was officially launched at BlockHash LIVE 2025, reflecting the Academy’s vision of integrating education, innovation, and practical relevance.

## Paper Presented at Blockchain Kaigi 2025



The 5th International Workshop on blockchain, “Blockchain Kaigi 2025 (BCK25)” organized by IIT Bombay, University of Zurich and Kyoto University from 4th to 6th December 2025 was held at IIT Bombay. The event served as a dynamic academic venue for researchers and practitioners from diverse scientific and technological domains to present their innovative ideas and developments in blockchain research. Ms. Sivadas Neelima (R&D Engineer), Kerala Blockchain Academy, participated on behalf of the team to present the paper on “Fortifying Donor Privacy and Enhancing Accessibility in Blood Donation: A Zero-Knowledge proof based approach”.

## Rethinking Education in the AI Era: Insights from Dr. Asharaf S at Manorama HORTUS 2025

Prof. Dr. Asharaf S., Dean (Development, Digital University Kerala), participated in a panel discussion titled “The Politics of Education: In the AI Era” alongside Tom M. Joseph and Dr. Soman K. P. at Manorama HORTUS 2025, a four-day celebration of literature and the arts that brought together thinkers and practitioners from diverse fields.

Reflecting on the evolving role of artificial intelligence in education, Dr. Asharaf highlighted AI’s potential to significantly reduce workload and support a “do more with less” approach that enables institutions to achieve greater outcomes with the same workforce.



Dr. Asharaf framed the discussion around three critical dimensions: knowledge creation, knowledge dissemination, and quality control. In the context of knowledge creation, he cautioned that AI systems built on neural networks and reinforcement learning can generate flawed outcomes if the AI model is trained on biased or inaccurate data, underscoring the importance of Responsible AI.

Addressing knowledge dissemination, He pointed to emerging models such as AI-assisted teaching and robotics-led learning, raising important questions about whether education or the use of AI in academia is becoming politicised. On quality control, he highlighted the challenges of AI-driven evaluation based on statistical patterns, particularly when uniform content is delivered to diverse learners.



He concluded by emphasising that technology itself has no stance. AI will not eliminate jobs; rather, those who effectively use AI will replace those who do not. Ultimately, humans remain responsible for providing guidance, making policy, and setting ethical direction in shaping the future of education.

## Invited Talk @ Vellore Institute of Technology (VIT), Chennai

Dr. Balasubramaniam S., Asst. Professor, School of Computer Science & Engineering, delivered a session titled “Role of Generative AI and Explainable AI in designing intelligent trustworthy systems” as a part of 5 Days FDP in “Next Generation Trends in Computing” organized by School of Computer Science and Engineering (SCOPE), Vellore Institute of Technology (VIT), Chennai on 21st November 2025.



## Invited Talk @ ToC-H Institute of Science and Technology (TIST)

Dr. Balasubramaniam S., Asst. Professor, School of Computer Science & Engineering delivered a session titled “Role of Generative AI and Explainable AI in designing intelligent trustworthy systems” as a part of 6 Days FDP in “Next Gen Engineering: Exploring Intelligent and Autonomous Systems” organized by Department of ECE & Robotics, ToC-H Institute of Science and Technology (TIST), Ernakulam on 21st November 2025.



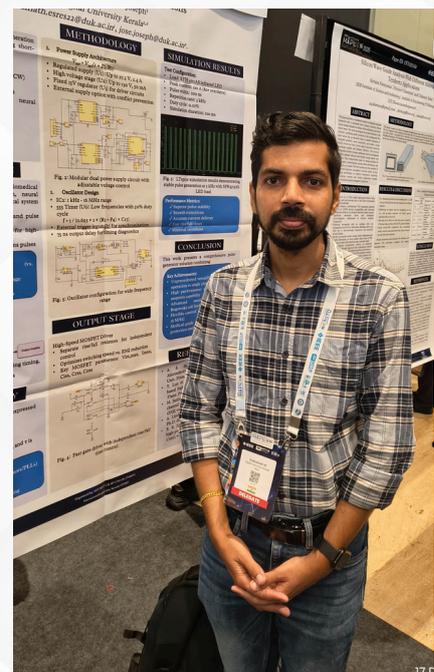
## Invited Session @ ANRF Sponsored National Seminar

Dr. Balasubramaniam S., Asst. Professor, School of Computer Science & Engineering delivered a Session titled “Quantum Machine Learning Algorithms for Real- Time Applications in Cyber Security” as a part of ANRF sponsored 2 Days National Seminar in “Quantum Machine Learning for Cyber Security: Opportunity and Challenges” organized by Dr.N.G.P Arts and Science College, Coimbatore, Tamilnadu on 17th and 18th December 2025.



## Research Presentation at IEEE MAPCON 2025

Mr. Gokulnath K, a PhD scholar working under the guidance of Dr. Jose Joseph, successfully presented his research paper titled "Design and Simulation of a Pulsar Circuit for Short Duration High Current Applications" at the prestigious IEEE Microwaves, Antennas and Propagation Conference (IEEE MAPCON 2025). The conference, held from December 14th to 18th, 2025, at the Lulu International Convention Centre, Grand Hyatt Bolgatty in Kochi, India, served as a comprehensive international platform for sharing cutting-edge research and technologies in the field of microwaves, antennas, and propagation. Gokulnath's work on pulsar circuits for high current applications demonstrates the university's continued commitment to advancing research in advanced electronic systems and medical electronics.



## Articles/ Conference Proceedings

Valsalam, S., & Thomas, T. (2025, December). Qubit-efficient block-wise hybrid quantum–classical image representation for NISQ hardware. Proceedings of the 8th International Conference on Data Analytics and Cyber Security (DACs 2025).

Niman, S., & Thomas, T. (2025, December). Overcoming black-box limitations in IoT malware detection with Kolmogorov–Arnold networks. Proceedings of the 8th International Conference on Data Analytics and Cyber Security (DACs 2025).

Chandran, N. V., Anoop, V. S., & Asharaf, S. (2026). Semantic text kernels: A hybrid interpretable framework for deep semantic analysis in textual data. Engineering Applications of Artificial Intelligence, 166(Part A), 113568. <https://doi.org/10.1016/j.engappai.2025.113568>

Rani, B. S. S., Mukherjee, P., & Ekstedt, M. (2026). Modular analysis of attack graphs for smart grid security. In N. Hubballi, R. Verma, & S. Rudrapatna K. (Eds.), Information systems security (ICISS 2025): Vol. 16380. Lecture notes in computer science. Springer, Cham. [https://doi.org/10.1007/978-3-032-13714-2\\_29](https://doi.org/10.1007/978-3-032-13714-2_29)

Nair, L. R., Anil, A., Mukherjee, P., & Aggarwal, M. (2026). Security-centric NWDAF module for threat detection and mitigation in 5G core networks. In N. Hubballi, R. Verma, & S. Rudrapatna K. (Eds.), Information systems security (ICISS 2025): Vol. 16380. Lecture notes in computer science. Springer, Cham. [https://doi.org/10.1007/978-3-032-13714-2\\_23](https://doi.org/10.1007/978-3-032-13714-2_23)

V, L., & Joseph, J. (2025). Sensitivity enhancement of CMOS-compatible planar inductive temperature sensors via geometric optimization. IEEE Sensors Letters. Advance online publication. [10.1109/LSENS.2025.3646168](https://doi.org/10.1109/LSENS.2025.3646168)

Reshmi, L. B., Valsaraj, P., Asokan, K., Ramamohan, T. R., & Satheesh Kumar, K. (2026). Adapted symbolic dynamic networks for multi-step forecasting of chaotic wind speed time series. Chaos, Solitons & Fractals, 203, 117610. <https://doi.org/10.1016/j.chaos.2025.117610>

Jones, J. F., Raj, V., Abas, P. E., Petra, M. I., Sivan, D., Satheesh Kumar, K., Jose, R., & Mathew, S. (2025). Application of artificial intelligence for asset integrity management of offshore oil and gas pipelines. Life Cycle Reliability and Safety Engineering, 14(4), 503–530. <https://doi.org/10.1007/s41872-025-00353-2>

Aromal, C. J., & Datta, S. (2025). FISTA-GAN: An interpretable cosine-decayed GAN for fast compressed-sensing MRI. In Proceedings of the 11th International Conference on Pattern Recognition and Machine Intelligence (PReMI 2025) (pp. 1–8). Springer.

Rani, R. S. S., & Datta, S. (2025). Dual attention guided wavelet domain ISTA-Net for noise resilient underwater passive sonar detection and classification. In Proceedings of the IEEE 22nd Indian Council International Conference (INDICON 2025) (pp. 1–6). IEEE

Lekshmi, V., Ranjith, K. R., & Joseph, J. (2025). An LCR readout with frequency switching for two-terminal multimodal sensors. In Proceedings of the IEEE Microwaves, Antennas and Propagation Conference (MAPCON 2025). IEEE.

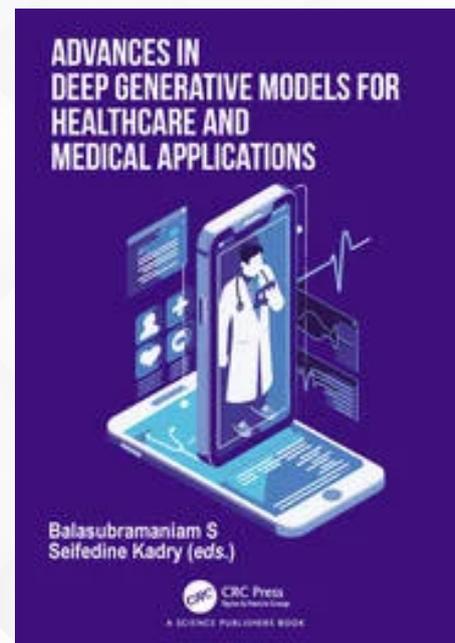
Balasubramaniam, S., et al. (2026). Attention-enhanced residual U-Net with histogram equalization for automated classification of gastrointestinal bleeding disorders. *Biomedical Signal Processing and Control*, 111, 108371. <https://doi.org/10.1016/j.bspc.2025.108371>

Balasubramaniam, S., et al. (2025). Optimization enabled online tiger-claw fuzzy region with clustering-based neovascularization segmentation and classification using YOLO-V5 from retinal fundus images. *International Journal of Intelligent Systems*. <https://doi.org/10.1155/int/6119924>

## Book Published

Balasubramaniam, S and Seifedine Kadry (Eds). (2026), “Advances in Deep Generative Models for Healthcare and Medical Applications”, First Edition, Pages:282, CRC Press, Taylor & Francis, ISBN: 9781003602088.

This book provides a platform for research on deep generative models, with an emphasis on its healthcare applications. The book addresses the unanswered questions that stop these approaches from making a huge difference in real-world clinical practice. The goal of this book is to bring together a wide range of methodologies which are using generative models in health care-related contexts. The book leverages the recent methodological advancements in deep generative models to address critical health-care challenges across all data-types, paving the way for their practical integration into the healthcare system and elevate their impact on the future of healthcare.



# Internship & Placement Highlights 2024-2026 Batch

Placed at 

Abhishek S, MSc Cyber Security  
 Akhil Krishnan V K, MSc Cyber Security  
 Ananthakrishnan E, MSc Cyber Security  
 Anietta Aruldas, MSc Cyber Security  
 Aravind G, MSc Cyber Security  
 Arshed Shan T P, MSc Cyber Security  
 Elijah John, MSc Cyber Security  
 Gopika Gopan, MSc Cyber Security  
 Neeraj Jayesh, MSc Cyber Security  
 Suhana S S, MSc Cyber Security  
 U K Rohit Krishna , MSc Cyber Security

Placed at 

Aditi R Pillai, MSc Cyber Security  
 Augustus Mathew, MSc Cyber Security  
 Gouri S, MSc Cyber Security  
 Ibrahim A R, MSc Cyber Security  
 Nanda Krishnan V, MSc Cyber Security  
 Prathibha Pradeep, MSc Cyber Security  
 Sreelakshmi Suneesh, MSc Cyber Security  
 Arjun Binu, MBA  
 Vaisakh S, MBA

Placed at 

Ananth Sankar, MSc Machine Intelligence  
 Adithya Jayasundar T S, MSc DA CS  
 Abhiram Anand, MSc DA GIS  
 Abhin A, MBA  
 Harikrishnan R, MBA  
 Parvathy S J, MBA  
 Anargh T, MTech CS

Placed at 

Lesly, MSc CS DA  
 Tony Thomas, MSc CS DA  
 Rohit R B, MSc DA CS  
 Merin J, MSc DA CS  
 Dhanush BR, MSc DA GIS

Placed at 

Arya R B, MTech CS  
 Jisha S, MTech CS  
 Anargh T, MTech CS  
 Anurag S S, MTech CS  
 Justin E, MTech CS

Placed at 

Anakha Anil U, MBA  
 Harsha G, MBA

# Internship & Placement Highlights 2024-2026 Batch

## *Placed in other Reputed Companies*

AgniDev, MBA  
 Ajsal Jaman P T, MBA  
 Nandana M, MBA  
 Salu J B, MBA  
 Shamnad A, MBA  
 Sneha Santhosh, MBA  
 Abhinand P Sreenivasan, MSc DA GIS  
 Rahul Debnath, MSc DA GIS  
 Adarsh M S, MSc CS DA  
 Ajeem Hussain Z, MSc CS DA  
 Aswin Krishna T P, MSc CS DA  
 Sarayu K K, MSc CS DA  
 Samuel Kurian Roy, MSc DA CS  
 Hadi Bin Noor, MSc Cyber Security  
 Ganga G, MSc Cyber Security  
 Anurag S S, MTech CS  
 Justin E, MTech CS







**Congratulations on your placements !!**

**"Wishing you great success and a bright future as you embark on this exciting new phase of your professional journey!"**



Curating a responsible digital world



*Designed and Developed*

@

Knowledge Centre  
Digital University Kerala