OCTOBER - DECEMBER | 2024-2025 | ISSUE 2

ASCII NEWSLETTER

ASSOCIATION OF STUDENTS OF COMPUTER SCIENCE FOR INFORMATION INTERCHANGE

AMRITA SCHOOL OF COMPUTING

AMRITA VISHWA VIDYAPEETHAM
DEEMED TO BE UNIVERSITY UNDER SECTION 3 OF UGC ACT, 95

VISION

To be acclaimed internationally for excellence in teaching and research in computer science and engineering, and in fostering a culture of creativity and innovation to responsibly harness state-of-the-art technologies for societal needs .

MISSION

Mission 1:
To Empower students with strong computer science and engineering foundations through analytical thinking and problem-solving skills.

Mission 2:
To inculcate entrepreneurial skills to develop solutions and products for interdisciplinary problems by cultivating curiosity, team spirit, and a spirit of innovation.

Mission 3:
To provide opportunities for students to acquire knowledge of state-of the-art in computer science and engineering through industry internships, collaborative projects and global exchange programmes with institutions of international disputes

Mission 4:
To develop life-long learning, ethics, moral values and spirit of service so as to contribute to the society through technology.

Mission 5:
To be a premier research-intensive department by providing a stimulating environment for knowledge discovery and creation.

PROGRAM SPECIFIC OUTCOME (PSO.)

PSO1 - Ability to design and implement innovative, optimal, and elegant computing solutions to interdisciplinary problems using standard practices, tools, and technologies.

PSO2 - Ability to learn emerging computing paradigms for research and innovation.

Anokha 2024

Dare to be Different!

Amrita Vishwa Vidyapeetham's Coimbatore campus recently hosted the 12th edition of Anokha 2024—a three-day national techfest held from October 17–19, 2024—that brought together over 6,000 students from across India.

Featured 55 cutting-edge technical events, including gaming challenges, cybersecurity contests, and robotics competitions, alongside a vibrant Techfair showcasing 50+ projects aligned with the UN SDGs. Over 35 workshops on emerging technologies were led by experts from global giants like Google, IBM, and Bosch, while the Anokha Lumiere Talk Series inspired audiences with sessions on engineering, leadership, and social change.

The CSE department secured first place in the major department category, highlighting its technical excellence, while Dr. Sasangan Ramanathan praised the fest's spirit of innovation and participation. Backed by top sponsors and a dedicated team of faculty and volunteers, Anokha 2024 was a resounding success, setting the stage for future technological breakthroughs.

IETE CLUB INDUCTION PROGRAM 2024-25

UNVEILING EXCITING PLANS

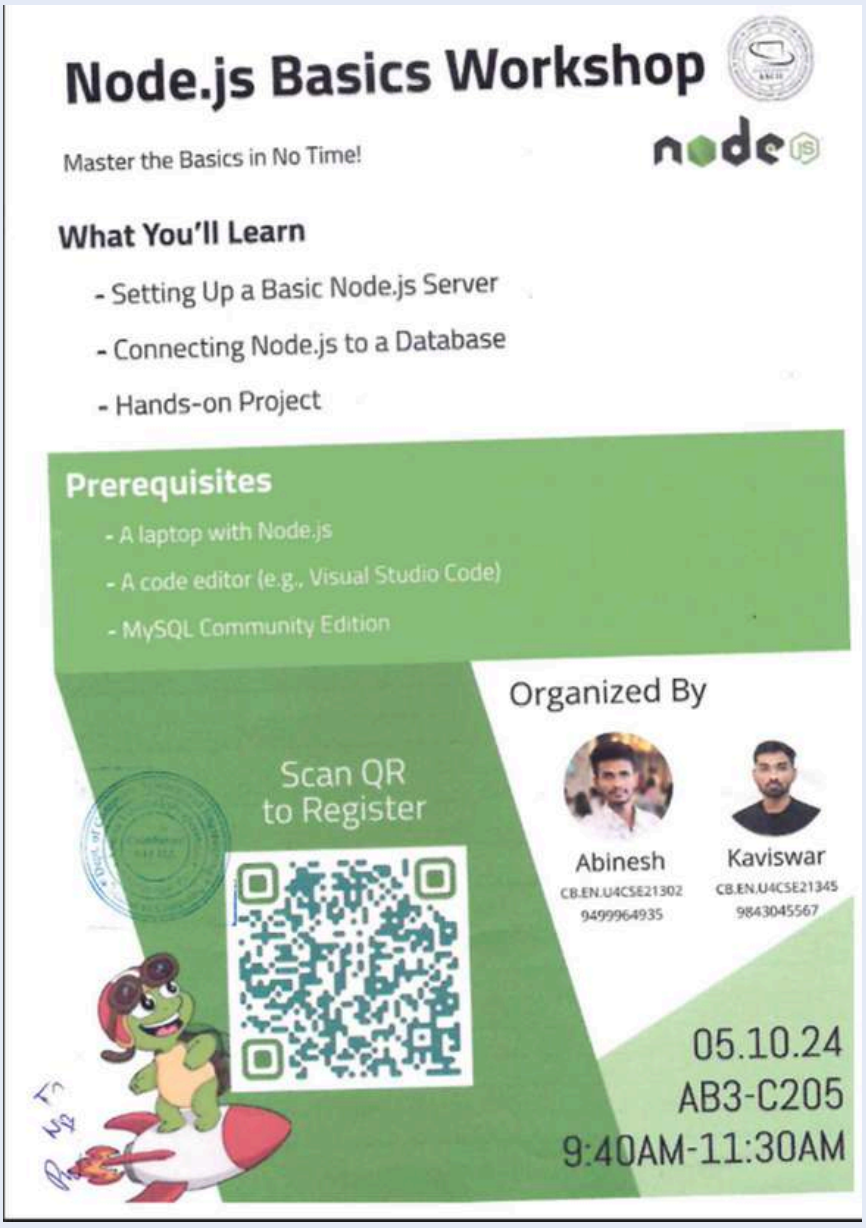
The IETE Club marked the beginning of its new term with an Induction Program held on December 26, 2024, at Sandeepani Hall, AB2. Starting at 4:30 PM, the event featured a keynote by Mr. Velmurugan E, CPO of Schnell Energy and Co-Founder, who shared valuable insights into IoT hardware, product development, and leadership.

The program highlighted the club's past impactful events, such as the Intel AI Hackathon and workshops on Docker and Raspberry Pi. Looking ahead, IETE announced the launch of a Weekly Competitive Programming Workshop starting January 2025, aimed at enhancing skills for internships and placements.

Attendees also had the opportunity to meet the IETE team, share ideas, and suggest future workshops while enjoying refreshments and networking. It was an evening filled with inspiration and enthusiasm, setting the tone for a dynamic year ahead.

MASTERING THE BASICS OF NODE.JS

On October 5, 2024, the Node.js Basics Workshop proved to be a smashing success, drawing a vibrant crowd of students eager to kickstart their back-end development journey. Organized by Abinesh, Deepak, Kaviswar, and Nithees, the session ran from 9:40 AM to 11:30 AM and featured a well-rounded mix of foundational concepts, hands-on exercises, and interactive Q&A sessions.

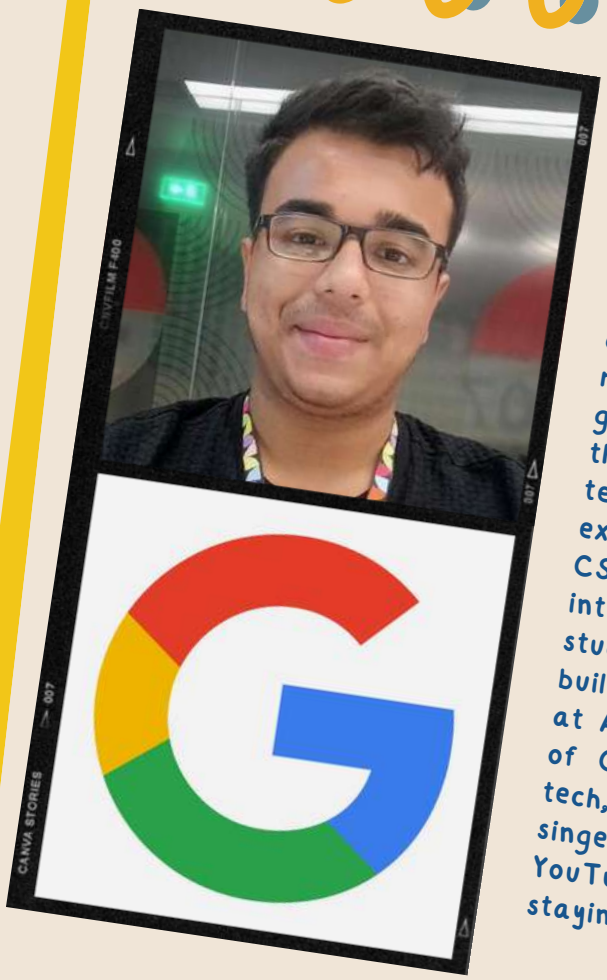


The workshop began with an introduction to Node.js, where participants gained valuable insights into its advantages and real-world applications, establishing the technology's relevance in modern web development. As the session progressed, students learned how to install Node.js, set up a basic HTTP server, and navigate core commands and file structures, with trainers providing one-on-one guidance to ensure that everyone successfully grasped these essential concepts.

In a particularly practical segment, the workshop also covered database integration with MySQL. Participants connected their Node.js servers to MySQL databases and executed queries to store and retrieve data, which reinforced their understanding of how back-end applications interact with databases. Overall, the workshop provided a solid foundation in Node.js and empowered the participants with the essential skills needed to advance their back-end development expertise.

PLACEMENT STORIES

JANUARY EDITION



I'm Ashwin Narayanan S, a 4th-year B.Tech CSE student at Amrita Vishwa Vidyapeetham, Coimbatore. My passion for Computer Science began when I created a grade calculator for my batchmates during my 12th-grade results, which showed me the real-world impact of technology. Since then, I've loved exploring the vast potential of CS. Currently, I'm diving deep into system design and case studies while also working on building a strong coding culture at Amrita by organizing Winter of Code through ACM. Beyond tech, I'm a trained Carnatic singer, enjoy sharing music on YouTube, love drawing, and staying active outdoors.

At Amrita, incredible experiences and mentors shaped my journey. Building the Anokha registration system with Dr. Ritwik M's guidance was a game-changer, boosting my skills and confidence. The Algorithms course by Dr. Vidya Balasubramaniam helped me crack my Google interviews. To juniors, I say: explore different fields, build hands-on projects, maintain a portfolio, and learn beyond course slides. Communicate well, document your internship work, and stay curious—opportunities are everywhere!

PLACED @

GOOGLE

AMRITA VISHWA VIDYAPEETHAM

SCHOOL OF COMPUTING COIMBATORE

Congratulations

TOP PLACEMENTS FROM CSE

Ms. ANKITA VENU
B.Tech CSE (2021-2025)
paloalto NETWORKS

Mr. ASHWIN NARAYANAN S
B.Tech CSE (2021-2025)
Google

Ms. MEENAKSHI S
B.Tech CSE (2021-2025)
Microsoft

Mr. M SHIVA
B.Tech CSE (2021-2025)
amazon

Mr. MOHAMED AASIL S
B.Tech CSE (2021-2025)
Microsoft

AMRITA VISHWA VIDYAPEETHAM
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SCHOOL OF COMPUTING COIMBATORE

Congratulations

Ms. RAJYASRI R. A
B.Tech CSE (2021-2025)
VISA

Mr. HARISH G
B.Tech CSE (2021-2025)
SAP

Mr. ABHINAV R
B.Tech CSE (2021-2025)
ARISTA

Mr. ABHINAV R
B.Tech CSE (2021-2025)
BNY

Ms. SANJANAA MATURI
B.Tech CSE (2021-2025)
Optum

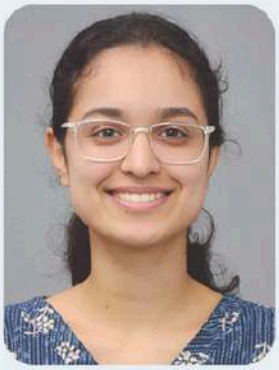
Ms. ENUGURU YASHASWINI
B.Tech CSE (2021-2025)
Optum

Mr. SANTHOSH S
B.Tech CSE (2021-2025)
Optum

Mr. SARAVANAK KARTHICK M
B.Tech CSE (2021-2025)
Optum

Ms. PICHERI LIKITHA
B.Tech CSE (2021-2025)
Optum

Ms. A SANDILYA SREEPADH
B.Tech CSE (2021-2025)
Optum



Ms. SAMYA REBECCA JIJI VARGHESE
B.Tech CSE (2021-2025)
Optum

Mr. SATHISH J
B.Tech CSE (2021-2025)
Optum

ON ACHIEVING ONE OF THE TOP PLACEMENTS IN CSE DEPARTMENT

STUDENT ACHIEVEMENTS

Internships

Thanus Kumaar A and Tharun Kumarr A of B.Tech CSE (2022-2026 batch) successfully completed his internship as a Full Stack Developer Intern in the Software Applications Department at LogicFlo AI Technologies Pvt. Ltd., from 22nd October to 22nd December 2024.

Samitha J successfully completed an Internship Program at Thydream Tech from 18th June to 18th July 2024.
Amruta Ginil excelled in the Lam Research Challenge online exam—successfully finishing the first round and seizing the opportunity to research and present a project on 6th October 2024.

Hackathons

Midhunan Vijendra Prabhaharan, Nishanth S Gowda and Akshar Sakhi from B.Tech CSE (2023–2027) – representing Team “Man – C” – earned the 3rd Prize at the Value Health Hackathon 2024 on 20.12.2024.

The Value Health Hackathon 2024 saw a good representation of B.Tech 2023-2027 batch. Of these, Midhunan Vijendra Prabhaharan, Nishanth S. Gowda, and Akshar Sakhi as part of Team Man-C, won the 3rd prize, while Yogini Aishwarya, Krishna Deepak, and C.B. Harinie also participated, as the team 'Code Crew'.

Kavin Mugilan S, Poornima S and Aravind Kumar of B.Tech CSE (2022-2026 batch) emerged as the winner in the "Hack-Arena" Hackathon for the theme in Generative AI at Guru Nanak Institutions, Hyderabad, held from 21st November to 23rd November 2024. Congratulations on this outstanding achievement!

Thanus Kumar, Aakash B, and Tharun Kumarr A of B.Tech CSE (2022-2026 batch) have showcased their talent and dedication with remarkable achievements. Tharun Kumarr A actively participated in Local host 3000 and emerged as a finalist in the EvoLumin hackathon conducted by the Amritapuri campus from 26th October to 27th October 2024. Congratulations on your well-deserved success and best wishes for your future endeavors!

Sports

AMRITA DEPARTMENT OF PHYSICAL EDUCATION

INTER CAMPUS TOURNAMENT

Certificate of Merit

This is to certify that Mr. ROHIT D representing COIMBATORE Campus has participated in the 4*50 FREESTYLE RELAY event and won I PLACE / II PLACE / III PLACE in the INTER CAMPUS AQUATIC MEET held at COIMBATORE Campus from / on 22-10-2024

Registrar

AMRITA DEPARTMENT OF PHYSICAL EDUCATION

INTER CAMPUS TOURNAMENT

Certificate of Merit

This is to certify that Mr. ROHIT D representing COIMBATORE Campus has participated in the 100M BREAST STROKE event and won I PLACE / II PLACE / III PLACE in the INTER CAMPUS AQUATIC MEET held at COIMBATORE Campus from / on 22-10-2024

Registrar

Dhamagatla Rohith Kumar of B.Tech CSE (2023-2027 batch) won lst place in the '4*50 Free Style Relay' and 2nd place in '100M Breast Stroke' events of the Inter-campus Aquatic Meet held at Amrita Vishwa Vidyapeetham, Coimbatore Campus, on 22nd October 2024.

Paper Presentations

Aishwarya V from B.Tech CSE (2022–2026) presented a paper titled "Multimodal System For Monitoring Mental And Emotional State With Deep Learning Model" under the guidance of Dr. Ishwar Bhiradi at the 3rd International Conference on Robotics, Control, Automation & Artificial Intelligence (RCAAI 2024) and earned the Best Paper Award from 14.10.2024 to 16.10.2024.

Course Completions

Eshwarnath Gajula from B.Tech CSE (2023–2027) successfully completed the "Machine Learning with Python" course and the "Build Your Own Responsive Website" project.

Amarthya Sujai from B.Tech CSE (2023–2027) successfully completed the online course “Python for Data Science” with an 87% score via NPTEL.

Keerthi Sree Jonnakuti from B.Tech CSE (2023–2027) successfully completed the Sawit.AI learnathon program on the domain of Fundamentals of Generative AI, held on 21.09.2024, and also completed the HP Life Online Course “Introduction to Cybersecurity Awareness” on 10.11.2024.

Shaun Sunny from B.Tech CSE (2022–2026) successfully completed the non-credit professional certificate in Google Cyber Security on 30.01.2024.

Amruta Ginil from B.Tech CSE (2022–2026) successfully completed both the Ethical Hacking Course and the “Introduction to Machine Learning” course via NPTEL, each a 12-week program.

Participations

In Ignite 2025, E. Rupak, Nithin Venkat Sharma, and G. N. Bhuvaneshwaran of the B.Tech CSE (2024–2028) batch participated in the Entrepreneurial Fair, where students showcased their projects to real-world investors, gaining invaluable opportunities to launch their own start-ups

Mohan D, a Ph.D. student (2024 batch), successfully completed the SCADA and PLC-based Industrial Automation program conducted by the Department of Mechanical Engineering at Amritapuri Campus, Amrita Vishwa Vidyapeetham, from 16th to 21st December 2024.

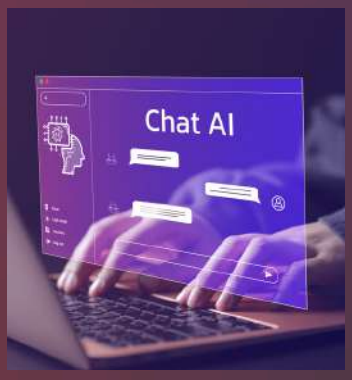
Mohan D (Ph.D - 2024) participated in a three-day workshop on “The Security in Computing & Communication” organized by TIFAC-CORE in Cyber Security & the Department of ECE at Amrita Vishwa Vidyapeetham, Coimbatore, and Indian Institute of Technology, Kanpur, from 24th to 26th October 2024.

From the 2023-2027 batch of B.Tech CSE, Chethana S Nair and P Tarun participated in the skit competition conducted as part of Sargamritam 2024, as a part of ‘AIU – Amrita Auditions & Inter-campus Youth Fest’ held at Amrita Vishwa Vidyapeetham, Coimbatore Campus, on 30th November and 7th December 2024

RECENT TRENDS IN COMPUTER SCIENCE

QUANTUM COMPUTING

Google unveiled 'Willow,' a quantum computing chip capable of performing computations in under five minutes—a task that would take classical supercomputers 10 septillion years.



SOMETHING NEW IN ARTIFICIAL INTELLIGENCE

Anima Anandkumar developed AI algorithms that significantly accelerate simulations of physical systems, including weather models and nuclear fusion reactions, enhancing prediction accuracy and speed.

Chinese AI firm DeepSeek introduced the R1 model, achieving high performance with minimal human intervention, potentially reducing development costs significantly.

HARDWARE INNOVATIONS

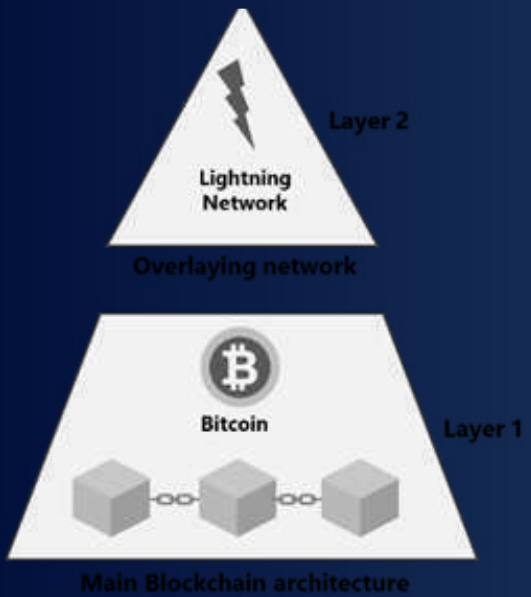
Cerebras Systems released the Wafer-Scale Engine 3, the largest-ever chip designed to train AI models ten times larger than OpenAI's GPT-4, marking a significant leap in AI hardware capabilities

NAVIGATING BLOCKCHAIN: FROM BARRIERS TO BREAKTHROUGHS

Blockchain technology promises to redefine industries and revolutionize digital trust. Yet, challenges like scalability issues, regulatory uncertainty, and technical complexities hinder its journey to widespread adoption. However, these obstacles fuel innovation, bringing blockchain closer to realizing its transformative potential.

Barriers to Adoption

Scalability is the major problem. Networks such as Bitcoin and Ethereum break under heavy loads of transactions with delays and higher prices. While Bitcoin processes roughly seven transactions per second, Ethereum processes only thirty, compared to older systems like Visa that handle more than 24,000. These limitations arise from block size and consensus methods, thus causing the network to become congested and inflicting heavy fees.



For proof-of-work systems like Bitcoin another problem is the consumption of energy, especially Bitcoin mining consumes energy comparative to small countries, raising environmental concerns. Unclear regulations create adoption challenges. Some countries have totally banned it while others have given partial approval. Businesses are now left to guess how to navigate this global field. This kind of vagueness in legislation will discourage investment and innovation. some other challenges faced are security threats, blockchain-based applications like smart contracts and exchanges are weaknesses which expose users to hazards.

One such example is the 2016 DAO attack on Ethereum, where millions of dollars were stole due to weaknesses in the code.
Interoperability issues hinder data and asset exchange across different blockchain platforms. Bitcoin, Ethereum, and Solana operate independently, complicating cross-platform interaction. The costly deployment of blockchains can be especially daunting for small enterprises due to the need for specialized infrastructure and qualified engineers. Privacy concerns emerge because public blockchains disclose transaction data, and sophisticated analysis can de-anonymize users, which is problematic in industries like as healthcare and banking. Blockchain's complexity is steep, making it inaccessible to non-experts, and discouraging developers and enterprises.

Additionally, as public blockchains grow, they have data storage problems, straining smaller nodes.
Blockchain's narrow range of use cases beyond Bitcoin limits its acceptance in other fields. In numerous industries, traditional databases are more straightforward and efficient, but the integration with older systems introduces complexity. Decentralized systems frequently experience governance challenges, with differences over protocol modifications resulting in contentious forks. Blockchain can be used in fraud and money laundering also, which Decentralized systems frequently experience governance challenges, with differences over protocol modifications resulting in contentious forks. Blockchain can be used in fraud and money laundering also, which ruins its reputation.

Breakthroughs Ahead

Despite these challenges, blockchain has significantly improved. Technologies such as layer 2 are improving scalability with the help of the Lightning Network, which supports fast off-chain transactions. The sharding, or division of the blockchain into smaller parts, improves the transaction speed. Energy consumption has also been reduced due to

Ethereum 2.0's shift towards proof-of-stake by eliminating the need for resource-hungry mining activities. Zero-knowledge proofs, or zk-SNARKs, are privacy innovations that enable private transactions without sacrificing transparency. In sectors such as healthcare services, where secrecy is paramount, privacy-oriented blockchains are the best fit.

The interoperability protocols that enable communication between blockchain platforms include Polkadot and Cosmos. Increasing regulatory clarity enables businesses to innovate with greater confidence. Blockchain avoids integration problems with legacy systems because APIs, middleware, and established protocols are used to connect traditional and decentralized networks. Decentralized autonomous organizations (DAOs) is one of the governance methods that encourage democratic decision-making with complete openness. Improving security techniques such as multi-signature wallets ensure the protection of assets, working on the weakness of the application.

We solve the challenges of storage and data bloat by using pruning, off-chain storage, and optimized architecture. High implementation costs are ruled out by open-source tools, frameworks, and Layer 2 solutions that reduce transaction fees. Hybrid solutions that combine blockchain and traditional technologies are expanding their use in non-cryptocurrency industries, ensuring a high value while lowering complexity.Finally, ethical issues of blockchain are being dealt with through a holistic Know Your Customer (KYC) and Anti-Money Laundering (AML) methods, ensuring regulatory compliance with the basic principles of blockchain.

Conclusion

Eventually, while there are significant challenges facing blockchain, growth in scalability, privacy, and clarity on regulation brings out the full promise of blockchain. With continued innovation and cooperation, blockchain promises to revolutionize sectors with a decentralized, transparent, and sustainable future.

Nethra Kanagaraj(CB.SC.U4CSE23230),
Srividya Manikandan (CB.SC.U4CSE23247)

Publications and Conferences

Dr. Bagavathi C

Neuro-Evolution-Based Language Model for Text Generation
https://doi.org/10.1007/978-3-031-69982-5_10

Augmented Super Resolution GAN (ASRGAN): Image Enhancement Via Reinforced Discriminator
https://doi.org/10.1007/978-3-031-60935-0_11

Dr. Gireesh Kumar

Athletic PathFinder: Motion Dynamics and Trajectory Mapping
https://doi.org/10.1109/ICCCNT61001.2024.10724520

Computing Communication and Networking Technologies (ICCCNT)

Dr. Lalithamani N

Addressing the Challenge of Deep Fake Media: Robust Detection for Ensuring Authenticity
https://doi.org/10.1109/ICCCNT61001.2024.10725478

Surveillance with YoloV8-for Crops or Wildlife and Fire Disaster Prevention

Dr. Anbazhagan M

An Empirical Analysis on ARIMA and Regression Models for Time Series Forecasting on Bitcoin Dataset
https://doi.org/10.1109/ICCCNT61001.2024.10725478

Computing Communication and Networking Technologies

Ms. Suchithra

Enhanced Diabetic Retinopathy Grading Using a Deep Hybrid Approach
https://doi.org/10.1109/ICCCNT61001.2024.10725342

Publications and Conferences

Ms. Bharathi D

Adaptability of Denoising Models for Low Dose CT Images
https://doi.org/10.1109/ICCCNT61001.2024.10725212

Dr. Swapna T.R

Deepfake Image Forgery Detection using Local Feature Descriptors
https://doi.org/10.1109/ICCCNT61001.2024.10724955

Ms. Radhika G

Enhancing Credit Card Fraud Detection with Deep Learning and Graph Neural Networks
https://doi.org/10.1109/ICCCNT61001.2024.10725478
Cooperative Self-Scheduling Routing Approach Based on Energy Efficient Optimal Link Stability Routing Allocation for Improving QoS-WSN

Dr. Radhika N

Regularized Hybrid Deep Learning for DDoS Attack Prediction in Software Defined Internet of Things (SD IoT)
https://doi.org/10.1109/ICPC2T60072.2024.10474620

A Hybrid Prediction Model for Disseminating the Factors Related to Anomaly Detection in Software Defined Networks
https://doi.org/10.1109/ICCCNT61001.2024.10725796

Dr. Ritwik

Towards assessing the credibility of chatbot responses for technical assessments in higher education' at 'IEEE Global Engineering Education Conference (EDUCON 2024)
https://doi.org/10.1109/EDUCON60312.2024.10578934

Publications and Conferences

Ms. Bindu K R

Graphsage-Based Named Entity Recognition for Malayalam
https://doi.org/10.1109/ICCCNT61001.2024.10725212

Dr. Vishnuvarthan R

Smart Buoy Integration: Optimizing Fish Supply Chain Management and Border Alert System
https://doi.org/10.1109/ICCCNT61001.2024.10726095

Dr. Shanmuga Priya S

Leveraging a Custom Multi-Modal OCR System for Marksheet Data Extraction
https://doi.org/10.1109/ICCCNT61001.2024.10725478

Dr. Anantha Narayanan V

Ambient Intelligent System for Appointment Management
https://doi.org/10.1109/ICPC2T60072.2024.10474620

Enhancing Autonomous Underwater Vehicle Sensor Precision with Adaptive Genetic Algorithm-aided Kalman Filtering
https://doi.org/10.1109/ICCCNT61001.2024.10724674

Ms. Anisha Radhakrishnan

LA Comparative Study of Hyperparameter Tuning in Deep Learning Models using Bayesian Optimization and XAI
https://doi.org/10.1109/ICCCNT61001.2024.10725868

NSS
National service scheme

Bamboo Plantation Drive at Ettimadai

Over 50 bamboo saplings were planted in the Ettimadai forest area as part of an initiative to restore ecosystems and enhance green cover. Volunteers showcased remarkable teamwork and commitment to environmental preservation. This effort is expected to significantly benefit the forest ecosystem over time.

Acknowledgment:
Special thanks to Mr. Nandhagopal, Amrita University, Dr. D. Venkataraman (NSS Program Coordinator), and the volunteers for making this initiative a success

Upcoming Events

The ACM Student Chapter at Amrita Vishwa Vidyapeetham, Coimbatore, presents Winter of Code 2024-25, a flagship open-source initiative running from December 17, 2024, to February 14, 2025.

This two-month-long event encourages students to contribute to real-world projects on GitHub, guided by their seniors. With ₹10,000 worth of bounties up for grabs, participants can boost their skills, build portfolios, and earn monetary rewards based on their contributions.

Join this collaborative coding adventure, sip some chai , and commit your code. Let's make this winter truly productive!

Key Highlights:

- Orientation Session: December 16, 2024, at 9 PM (Online via YouTube).
- Contest Period: December 17, 2024, to February 14, 2025.
- Registration: Use the Amrita email ID to register at forms.office.com/r/xH6GzZZhzC.

Upcoming Events

PRAGATI 2025 - March 3 and March 4

Pragati is an annual national-level B-Fest organized by Amrita School of Business, Coimbatore. The B-Fest comprises of management games crafted for each domain of business administration including Marketing, Finance, Operations, Human Resources and Analytics.

Year-on-year, Pragati has proven its mettle by attracting talent from many leading management institutes in the country to challenge each other across all domains and aim at achieving the overall championship award.

MEET THE ASCII TEAM

ABHINA

SRAVYA

MAHISRI

THARUN

APARNA

Dr. JEYAKUMAR

Dr. UMA J

NITHIN

MALATHI P

Dr. VANDHANA

RAMYA G R

Dr. POOJA MISHRA

CHANDANA

DHAMINI

KEYA

SRINIDHI

SUHAS

AADITHYA

SUMITHRA