AMRITA | College of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

"BITS & BYTES"
NEWSLETTER
Vol. 2 Issue 1
Nov. 2022- April 2023

ABOUT THE COLLEGE

Amrita College of Engineering and Technology (ACET) is a co-educational, self-financing Engineering College (formerly Sun College of Engineering and Technology, established in the year 1999) run by Mata Amritanandamayi Math (MAM), Kollam from the academic year 2018-19. MAM is an International charitable organization aimed at the spiritual and material upliftment of humankind. MAM was founded in 1981 by the spiritual leader and humanitarian Mata Amritanandamayi Devi, with its headquarters in Paryakadavu, Alappad Panchayat, Kollam district, Kerala.

The College has been approved by the All India Council for Technical Education, New Delhi, and is affiliated to the Anna University, Chennai. The College is located inside Amrita Institutions Campus, Nagercoil, in a sprawling area of a 100-acre lush green campus, which is situated about 5 Kilometres north of Nagercoil, the headquarter of Kanyakumari District.

Amrita Institutions is known for its value-based quality education through continuously improving its infrastructure, human resources, and teaching-learning process and we are committed to imparting high-quality skill-based education in Engineering & Technology to the youth in order to meet the challenging requirements of the industries.

ABOUT THE DEPARTMENT

The department of Computer Science & Engineering was established in the academic year 1999-2000 with an annual intake of 60. The intake has been increased to 120 from the academic year 2018-19. The Department offers B. E. (Computer Science & Engineering), M. E. (Computer Science & Technology). The UG-CSE Programme and PG-CSE Programme are affiliated by Anna University, Chennai and accredited by AICTE, New Delhi.

The faculty members are from diverse streams and specializations. Some of the major areas of research interest are Cloud Computing, Resource Allocation, Sensor Networks, Network Security,Data Analytics, Machine Learning, Image Processing, Optimization, Data Security, Wireless Sensor Networks and IoT (Internet of Things). Our faculty members are experienced and committed to imparting knowledge.

We also provide placement opportunities through potential recruiters like IBM, Infosys, TCS, HCL, Wipro, CTS, Honeywell, Amazon,etc. with dedicated placement training as a part of the curriculum. The department provides quality education and produces highly skilled graduates, who are in demand in the current IT industry.

Message from HoD's Desk

Dr. P. M. Siva Raja
HOD/CSE

Welcome to the Department of Computer Science and Engineering. We, the Department of Computer Science, feel our enthusiasm to publish the first edition of our departmental newsletter "Bits and Bytes". This edition covers the various events from November 2022 to April 2023.

I, as a Head of the Department would like to thank all the faculty members and students for their limitless support and sincere efforts for the betterment and development of department. On this occasion, I congratulate all the team members of the editorial board for bringing up this edition in a better shape. This newsletter will enclose all important events and activities of our department.

Additionally, it also provides a platform to recognize and congratulate our department achievers. Exploring hidden talents from students side and providing remarkable insights from the world of technology has been the main motive behind this newsletter. I hope this culture of publishing newsletter continues forever.

Message from Editor's Desk

I am very glad to release the newsletter "Bits and Bytes". This will play a major role in presenting the activities that are happening in our department. It is the technical platform to explore hidden talents of students and authorize their responsibility, involvement and achievements in both Extra and Co-Curricular activities. This will also feed their thirst for knowledge with articles from sphere of technology. I confirm that every student uses this platform as a key to express their views and to upgrade their expertise.

Ms. R. Saranya
AP/CSE

"Along with knowledge about the world, we have to understand yourselves. Only then will our education be complete."   *-Mata Amritanandamayi*

What's Inside?

Vision of the Department

➢ To become a center of excellence in teaching and research in the field of Computer Science and Engineering through empowering the graduates to be technologically sound, self- motivated and industry-ready software professionals satisfying societal expectations.

Mission of the Department

➢ Facilitating quality education through enriching the technical knowledge and skills of the students to achieve academic excellence.
➢ Establishing collaboration with the industries and leading educational institutions to promote innovative research to address real-world problems of society using emerging technologies.
➢ Providing exposure to the latest tools and technologies to encourage students for continuous learning to make them competent professionals.

Programme Educational Objectives (PEOs)

Graduates can

➢ Apply their technical competence in computer science to solve real world problems, with technical and people leadership.
➢ Conduct cutting edge research and develop solutions on problems of social relevance.
➢ Work in a business environment, exhibiting team skills, work ethics, adaptability and life-long learning.

Programme Specific Outcomes (PSOs)

The Students will be able to

➢ Exhibit design and programming skills to build and automate business solutions using cutting edge technologies.
➢ Strong theoretical foundation leading to excellence and excitement towards research, to provide elegant solutions to complex problems.
➢ Ability to work effectively with various engineering fields as a team to design, build and develop system applications.

Workshop/Seminar Organized:

Seminar on "Exploring the World of IT"

Department of Computer Science and Engineering in association with Code Club organized a seminar on "Exploring the World of IT" on November 19th, 2022. The resource person for the seminar is Mr. MukeshM, Technology Analyst, Infosys Limited, Technopark, Trivandrum. The resource person began the session by explaining how IT plays a vital role in our modern world. Then, he described the different areas where the students can work and also gave key ideas to get into the corporate world. The seminar was very informative and provided the participants with enormous knowledge of IT industry

Felicitation by Head of the Department   *Interactive session by the chief guest*

Seminar On Increasing Demand of Cloud Computing Skills

The seminar on the increasing demand for cloud computing skills was organized by the Department of Computer Science and Engineering in association with the Android Club. The event was conducted on 04-11-2022 between 10.00 am and 12.30 pm. The event started with prayer song. An expert Mr. Debansu Saha, Senior Operations Manager& Head, Amazon Web Services, Bangalore presided as chief guest and shared his knowledge with the students. Ms. Mekha Nair student in the III year CSE welcomed the gatherings, and Ms. Aishwarya student in the II year CSE introduced the chief guest. Our College Chairman K.Ramsubhan IAS(Retd) welcomed the chief guest with bouquet. Principal and Academic Director Dr. T.Kannan gave a presidential address. Dr P.M Sivaraja, Head of the Department of Computer Science and Engineering appreciated the students for being a part of this seminar, Chairman Mr. K. Ramsubhan IAS(Retd) honoured the chief guest with a memento Mr. I. Anantraj AP/CSE acted as the event coordinator. Ms. Sneha and Ms. Kishanthini acted as Master of Ceremony for the event. Finally, the event was concluded with vote of thanks and National Anthem.

Guest of Honour by our chairman   *Presentation by the chief guest*

Workshop on "Personality Development for Supporting Staff"

Department of Computer Science and Engineering in association with Computer Society of India organized a Workshop on "Personality Development for Supporting Staff" on 24th January, 2023. The Resource Persons of the workshop were Dr. R. Dhaneesh, HOD/ Mgmt. Studies, Dr. S. Sivakami,

AP/Mgmt. Studies, and Dr. B. Babu, HOD/Mechanical Engineering from Amrita College of Engineering and Technology. The programme began with a prayer seeking the blessings of our beloved Amma, Sri Mata Amritanandamayi Devi. Mrs. S. Anusooya, AP/ECE, welcomed the gathering. As a Guest of Honour, Mrs. S. Anusooya, AP/ECE, presented a memento to all the resource persons. Mrs. R. Saranya, AP/CSE concluded the workshop with vote of thanks. The seminar was very informative and the participants took away a great deal of information. They liked the workshop as a whole.

Welcoming the chief guests

Participants of the workshop

Faculty Development Program/Conferences/Workshops-Attended by the Faculty

Sl. No	Faculty Name	Date	Topic	Workshop/Conference / Seminar/Summer or Winter School	Organizer Name and Address
1	Mrs. S. Vidhya	14-11-2022 to 18-11-2022	FDP on Cyber Security in Post-Quantum World.	Faculty Development Program	Vellore Institute of Technology, Chennai
2	Mrs. R. P. Sumithra	14-11-2022 to 18-11-2022	FDP on Cyber Security in Post-Quantum World	Faculty Development Program	Vellore Institute of Technology, Chennai
3	Mrs. V. Thanammal Indu	19-11-2022	Public Speaking: The Gamechanger For Your Business/Career	Webinar	IEEE Women in Engineering, Madras Section
4	Mrs. V. Thanammal Indu	October-November 2022	Innovation Ambassador Training "Advanced Level"	Online Training Programme	MoE's Innovation Cell and AICTE
5	Mrs. V. Thanammal Indu	July-October 2022	Software Project Management	Faculty Development Program	IIT Kharagpur (NPTEL-AICTE)
6	Mrs. C. Karpagavalli	11-11-2022	Deep Learning Techniques on Medical Image Classification	Webinar	M.Kumarasamy College of Engineering, Karur
7	Mrs. S. L. Jothilakshmi	11-11-2022	Deep Learning Techniques on Medical Image Classification	Webinar	M.Kumarasamy College of Engineering, Karur
8	Dr. P. Krishnakumar	21-11-22 to 25-11-22	Recent research convergence in artificial Intelligence and Internet of things	Faculty Development Program	Bon Secours College of Women
9	Mrs. V. ThanammalIndu	22-08-2022 to 25-11-2022	Basics of "Remote Sensing, Geographical Information System and Global Navigation Satellite System	Coordinated online training course	IIRS/ISRO
10	Mrs. V. ThanammalIndu	2-12-2022	Reconfigurable Intelligent and Holographic Surfaces for Wireless Communications	Technical Talk	IEEE/VTS Madras Chapter

11	Mrs. K. Rejini	26-12.2022 to 30-12-2022	FDP on Recent Trends in 5G Communication Networks	Faculty Development Program	Sri Sairam Engineering College, Chennai
12	Mrs. K. Rejini	07-12-2022 to 12-12-2022	Online FDP on Machine Learning	Faculty Development Program	Sinhgad Institute of Technology, Lonavala, Pune
13	Mrs. S. L. Jothilakshmi	26-12.2022 to 30-12-2022	FDP on Recent Trends in 5G Communication Networks	Faculty Development Program	Sri Sairam Engineering College, Chennai
14	Dr. T. S. Sasikala	07-12-2022 to 12-12-2022	Online FDP on Machine Learning	Faculty Development Program	Sinhgad Institute of Technology, Lonavala, Pune
15	Mrs. S. Anjana	07-12-2022 to 12-12-2022	Online FDP on Machine Learning	Faculty Development Program	Sinhgad Institute of Technology, Lonavala, Pune
16	Mrs. Archana V Nair	07-12-2022 to 12-12-2022	Online FDP on Machine Learning	Faculty Development Program	Sinhgad Institute of Technology, Lonavala, Pune
17	Mrs. Archana V Nair	26-12.2022 to 30-12-2022	FDP on Recent Trends in 5G Communication Networks	Faculty Development Program	Sri Sairam Engineering College, Chennai
18	Mr. I. Anantraj	14.12.2022 to 16-12-2022	FDP on Disruptive Technologies for next gen computing	Faculty Development Program	Sri Krishna College of Engineering and Technology, Coimbatore
19	Dr. P. Krishna Kumar	8-12-2022 to 9-12-2022	Intellectual Property Rights	Faculty Development Program	Karpagam College of Engineering, Coimbatore.
20	Dr. N. V. RajeeshKumar.	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
21	Dr. P. M. Siva Raja	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
		23-01-2023 to 28-01-2023	Recent Trends In Machine Learning, IoT And Data Science	Faculty Development Program	Asansol Engineering College, West Bengal
22	Mrs. R. P. Sumithra	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
		23-01-2023 to 28-01-2023	Recent Trends In Machine Learning, IoT And Data Science	Faculty Development Program	Asansol Engineering College, West Bengal
23	Mrs. S. Vidhya	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
		23-01-2023 to 28-01-2023	Recent Trends In Machine Learning, IoT And Data Science	Faculty Development Program	Asansol Engineering College, West Bengal
24	Mrs. S. L. Jothilakshmi	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
25	Mrs. V. Thanammal Indu	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
26	Dr. T. S. Sasikala	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
27	Mrs. S. Anjana	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College

28	Mrs. R. Saranya	23-01-2023 to 28-01-2023	Machine learning & Deep Learning	Faculty Development Program	CARE College of Engineering
29	Mrs. G. Prem Nisha	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
30	Mrs. K. Rejini	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
31	Dr. P. Krishna Kumar	29-01-2023	Sonnets as a Literary Form & scope of service for India	Faculty Development Program	Vellore Institute of Technology, Vellore
32	Mrs. Archana V Nair	2-1-2023 to 6-1-2023	Data Science using Machine Learning	Faculty Development Program	Pravara Rural Engineering College
33	Mrs. V. Thanmmal Indu	02-01-2023 to 06-01-2023	Inculcating Universal Human Values in Technical Education	Faculty Development Program	All India Council for Technical Education (AICTE)
34	Mrs. R. Saranya	23-01-2023 to 1-2-2023	Artificial Intelligence and Machine Learning	Faculty Development Program	NIT Warangal
35	Dr. T. S. Sasikala	13-2-2023 to 17-2-2023	Industrial Metaverse XR	Faculty Development Program	Ingage- Nan Mudhalvan
36	Mrs. Prem Nisha.G	06-03-2023 to 11-02-2023	Future Research and Innovation Technologies	Faculty Development Program	Dr Joseph Jawhar IET Kanyakumari
37	Mrs. S. Vidhya	20-03-2023 to 24-03-2023	Blockchain Technology	Faculty Development Program	EICT-IIT, Kanpur
38	Mrs. S. Vidhya	10-04-2023 to 2-04-2023	Research Methodology and Intellectual Property Rights	ICSSR Sponsored Seminar	Amrita College of Engineering and Technology, Nagercoil
39	Mrs. V. ThanammalIndu	10-04-2023 to 12-04-2023	Research Methodology and Intellectual Property Rights	ICSSR Sponsored Seminar	Amrita College of Engineering and Technology, Nagercoil
40	Mrs. R. Saranya	10-04-2023 to 12-04-2023	Research Methodology and Intellectual Property Rights	ICSSR Sponsored Seminar	Amrita College of Engineering and Technology, Nagercoil
41	Mrs. V. ThanammalIndu	28-03-2023 to 01-04-2023	New Age Technologies	Faculty Development Program	SCOPE, VIT-AP University, Amaravati
42	Mrs. V. ThanammalIndu	Jan-Feb 2023	Python for Data Science	Faculty Development Program	NPTEL-AICTE

Publication by the Faculty Members in Journal

- **Siva Raja, P. M., Vidhya, S., & Sumithra, R. P.** (2022) . UNET-Based Deep Learning System for Disease Detection and Classification of Plants. *Periodico di Mineralogia*, *91*(5), 835-845.
- **Vidhya. S.,** & Kalaivani, V. (2022). Secured Health Data Transmission using Lagrange Interpolation and Artificial Neural Network. *Computer Systems Science and Engineering*, *45*(3), 2673-2692. https://doi.org/10.32604/csse.2023.027724
- Raja, P. S., **Vidhya, S., Sumithra, R. P.,** & Ramanan, K. (2022). Tversky Similarity based Deep Neural Learning Classification for Engineering Alloys. *IOP Conference Series: Materials Science and Engineering. 1258*(1), 1-11.

- **Indu, V. T.,** & Priyadharsini, S. S. (2023). Optimized deep feature selective concatenation of recurrent encoder model and pretrained convolutional neural network model for leaf disease identification. *Journal of Electronic Imaging, 32(1)*, 013046.
- **Siva Raja P. M., Anjana. S., K. Rejini &, I. Anantraj.**, Information Hidden Techniques Analysis Based On GA AND PSO with LSBMR , *Neuro quantology.21(1),*1-6.

Publication by the Faculty Members in Conferences

- **Jothilakshmi, S. L**., & Ranjith, V. G. (2022, October 27-28).*Effective Teaching and Learning Process in Education Using Innovative Techniques*. TEODLENEP 2022, Pudhucherry, India.
- **Rajeesh Kumar, N. V., & Anjana, S.** (2022,December 10-11). *Cluster Head selection using OA-PU algorithm in IOT*. IEEE STCR 2022. Sathyamangalam, Tamil Nadu, India.
- Vidhya R. G., **Sasikala, T. S.,** Ahamed, A. M. U., Khan, S. A. L. A., Singh, K., & Saratha, M. (2022, November 24-25). *Classification and Segmentation of Mitotic Cells using Ant Colony Algorithm and TNMClassifier*. ICAISS (2022). IEEE, Trichy, India
- **Dr. T. S. Sasikala**, published a paper entitled "*Classification and Segmentation of Mitotic Cells using Ant Colony Algorithm and TNM Classifier*" in ICAISS-22 Proceedings, paper no.342 Page No.722-7866844-6847 Organized by CARE College of Engineering, Trichy.
- **Saranya R.** (2023, March 25). *A Survey Of Block Chain Based Cybersecurity System.* NCMRI 2023, Nagercoil, India.
- **Thanammal Indu, V.**, (2023, April 15). *Rice Disease Classification using Deep Convolutional Neural Networks with Fuzzy Classifier.* PRECCON, Loni, Maharashtra, India.

Publication by the Faculty Members in Patent

Sl. No.	Applicants	Title	Submission date & file No.	Status Filed/ Published/ Received
1	Dr. P. M. Siva Raja	Method And System For Analyzing Magnetic Resonance Images	202141030227	Received
2	Dr. N. V. Rajeesh Kumar & Dr. P. Krishna Kumar	Detection And Isolation Of Attacks InManet Using Trust Based Security	10/2/2023 2O2341008748	Published
3	Dr. P. M. Siva Raja Mrs. R. P. Sumithra & Mrs. S. Vidhya	Deep Learning Neural Classification For Structure-Property Modelling With Engineering Alloys	08/03/2023 & 202341015395	Published

Club Activities

Amrita Institution's Innovation Council (AIIC)

Department of Computer Science and Engineering, Amrita College of Engineering and Technology in association with the Amrita Institution's Innovation Council (AIIC) organized an Intra College Idea Competition, "Innovation Inferno: Ignite Your Creativity, Your Ideas" on 20-02-2023 from 2:00 p.m. to4:10 p.m. in Amriteshwaryai Hall. Around 14 teams participated and presented their ideas at the event. The event started with prayer and a welcome address by Ms. M. Kishanthini of IV year B. E. CSE. The student teams presented their ideas and they were evaluated by a panel of judges, Dr. P. M. Siva Raja, HoD/CSE, Dr. M. Navaneetha Krishnan, AP/Mech., Mr. P. Saravanamuthukumar, AP/Mech., and Mr. P. Srinivasan, AP/ECE. The evaluators also gave suggestions for the improvement of innovative ideas. The event ended with vote of thanks by Ms. Sakthi Shanmuga Priya of III year B. E. CSE. The top three teams were selected and

appreciated with a Certificate of Achievement and all the participants received a Certificate of Participation. The event was coordinated by Mrs. V. Thanammal Indu, AP/CSE.
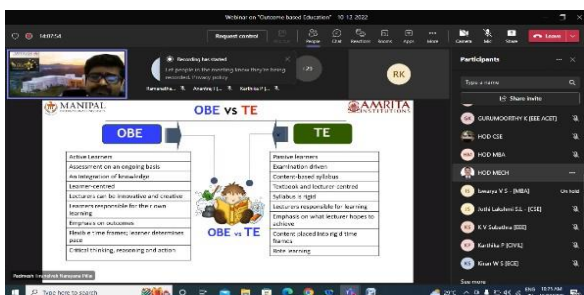

Participants of the event

Presentation by the students

ISTE Club

Department of Computer Science and Engineering in association with ISTE organized a webinar on "Outcome based Education" on December 10th, 2022. The resource person for the Webinar was Dr. T. V. N. Padmesh, Assistant Professor, Department of Chemical Engineering, Manipal International University, Malaysia. The Webinar started at 10:00 am by seeking the blessing of Almighty and beloved Amma with prayer song. Mrs. S. Vidhya, AP/CSE, welcomed the gathering and introduced the chief guest. The resource person began the session by explaining an idea of what students are expected to know and be able to do in the **Outcome based Education**. In this webinar around 40 faculty members participated from various departments of Amrita College of Engineering and Technology.

Presentation by the chief guest

Presentation by the chief guest

Android Club

Department of Computer Science and Engineering in association with the Android Club organized the seminar on the mobile app development on 10-02-2023 between 10.00 am and 12.30 pm. The event was started with a prayer song. An Expert Mr. R. Saravana Kumar, Managing Director & CEO, ICONIX Software Solution, Tirunelveli presided as chief guest and shared his knowledge with the students. Mr. I. Anantraj, AP/CSE coordinator of Android club welcomes the gatherings.

Dignitaries on the dias

Hands-on session for the students

FOSS CLUB

Department of Computer Science and Engineering in association with FOSS Club organized a seminar on "Role of Open Source Software in Education" on December 1st, 2022. The resource person for the seminar is Dr. G. Jai Arul Jose, Former Professor at Oman College of Management & Technology and Head,Department of Computer Applications, St. John's College of Arts and Science. The seminar started at 10:30 am by seeking the blessing of Almighty and beloved Amma with prayer song and lighting the lamp. Ms. A. K. RaajaSree, II CSE welcomed the gathering and Ms. N. Nujha, II CSE, introduced the chief guest. The resource person began the session by sharing his ideas about Open Source software. Then he differentiated pirated software and open sources software. He encouraged the students to improve their technical and social skills by contributing to Open Source Software. The seminar ended around 12:30 pm with Vote of Thanks by Ms. V. K. Archanaa, II CSE. As a gesture of thanks, the Head of the Department Dr. P. M. Sivaraja and the event Coordinator Dr. T. S. Sasikala presented a memento to the resource person. The seminar was very informative and provided the participants with enormous knowledge of Open Source Software in Education.

Participants of the seminar

Special Address by Resource Person

Symposium in the Department

Amrita College of Engineering and Technology in association with the Department of Computer Science and Engineering organized Symposium - "INNOTSAV 2K23" on 23-03-2023. The function started by seeking the blessings of the almighty and beloved Amma, Sri Mata Amritanandamayi Devi with Prayer song and lightening the lamp. Ms. N. Sophia II year CSE welcomed the students from various colleges who attended the event. Dr. P. M. Siva Raja, Head of the Department gave the presidential address. As a token of appreciation for the faculty members' tireless work and the students' achievement, Head of Department, Dr. P. M. Siva Raja presented the mementos to them. The student coordinators Mr. B. Bala Abinesh Surya and Ms. R. Nivetha of IV year CSE with a team of students organized various events for the participants that helped develop their skills. Additionally, a platform was set up to showcase the students' cultural talents. Finally, the vote of thanks was given by the event coordinator Mrs. Sumithra R P, Assistant Professor, Department of Computer Science and Engineering. On behalf of Amrita Management, Principal Dr. T. Kannan, and the Administrative Manager, Mr. V. Prabhakaran, appreciated the CSE department faculty members and students for the grand success of the event.

Varies technical events take place in symposium

Cultural Events:

Varies cultural events take place in symposium

Internship Arranged

➢ Mr. T. P. AswinKrishna, Mr. A. NishanthKumar, Mr.T. L. Nitish Kumar, Ms. N. Nujha, Mr. P. M. Prajoth, Ms. R. Priyadharshini, Ms. A. K. Raaja Sree, Ms. S. N. Raj Laxmi, Ms. S. Shenbaga Varna, Mr. M. Shervinsurgith of II Year B.E. (CSE) had undergone 15 days of internship at Indian Institute of Technology Madras, Chennai during 01.02.23 to 16.02.23.

➢ Mr. M. Abaneesh, Ms. K. Abinaya, Mr. M. Abish, Mr. S. Adarsh, Mr. AhsanSyedAli, Ms. R. K. Aiswarya, Mr. S. Ajithumar, Mr. C. S. Anirudhan, Mr. A. R. Anu, Mr. I. Aravinthan, Ms. V. K Archanaa, Mr. R. V. Arunathish, Mr. C. Arun Kumar, Mr. P. Asvinth, Ms. A. R. Athulya, Mr. Chandra Pradeep , Ms. D. S. Dharshana, Mr. G. V. Dharun, Mr. E. Elandhariyan, Mr. P Esakki Raj, Mr. G. S. Govindh, Mr. S. P. Iyappan, Ms. A. Karthika, Mr. K. Kishore, Mr. M. Manikandan, Mr. K. Manoj, Ms. M. Maria Mowshika, Mr. T. Mugesh, Mr R. S. Nandish Ram, Mr. K. J. Raj Kumar, Ms. P. Roshika, Ms. S. J. Sajaya, Ms. J. Sakthi, Ms. K. S. Sanjana, Ms. S. Santhiya, Mr. Shivaprakash, Ms. Vaishaly, Ms. A. Anusha, Ms. C. P. Dharshini, Mr. Kishor Kumar, Ms. M. Meghasalistas, Ms. A. S. Sreelekshmi, Ms. S. Supprabha of II Year B.E. (CSE) had undergone 15 days of internship at M/s. TESSOLVE Semiconductor Pvt. Ltd., Chennai during 31-01-2023 to 14-02-2023.

Industrial Visits Arranged

Industrial visit to UST Technopark, Thiruvananthapuram

      Department of Computer Science and Engineering organized an Industrial Visit on 25th November 2022 to UST Technopark, Thiruvananthapuram for second-year students. Three faculty members, Dr. Krishna Kumar P, ASP/CSE, Mrs.V.Thanammal Indu, AP/CSE, and Mrs.Archana V Nair, AP/CSE accompanied the 63 students of II year CSE. Our college team was warmly welcomed by Mr. Aswin Raj D, Lead-Color Gold-TVM, and his team members. An industry-ready presentation was given to students exploring the working environment. The Students were highly motivated and benefitted from the visit. The students were grateful to the Management, HoD, and the faculty members for their support and guidance."

Students interacting with UST Global staff

Students with UST employees

Staff Achievements

Sl. No.	Name	Date	Event Name	Organizer Name andAddress	Prize
1	Mrs. V. ThanammalIndu	30-01-2023 to 4-2-2023	Technovation Hackathon	Prof. Nitin Rakesh, ShardhaSchool of Engineering and Technology, Greater Noida	Certificate of Appreciation for mentoring team ID SHAH-1667
2	Mrs. S. L. Jothilakshmi	24-03-2023	ATOS -Youth Empowerment Program- Microsoft Power BI Data Analyst Training	ICT Academy Module NoE6 - 03, 6th floor Block - E IIT Madras Research Park Kanagam Road, Taramani, Chennai 600 113 Tamil Nadu, India	Received Fund Rs.49000/
3	Mrs. V. ThanammalIndu	July-October 2022	NPTEL Online Certification	IIT Kharagpur	Elite
4	Mrs. V. ThanammalIndu	Jul-Dec 22	NPTEL Computer Science and Engineering discipline	NPTEL by IIT & IIS	NPTEL DISCIPLINE STARS
5	Mrs. V. ThanammalIndu	Jan-Feb 2023	NPTEL Online Certification	NPTEL-AICTE, Chennai.	Elite Silver (Topper2%)
6	Mrs. V. ThanammalIndu	31-03-2023	YESIST'12 2023 (Project presentation)	Sri Sivasubramaniya NadarCollege of Engineering, Chennai.	Mentor for the team

7	Mrs. K. Rejini	Jan-Mar 2023	NPTEL Online Certification	NPTEL-AICTE, Chennai.	Elite
8	Mrs. S. Vidhya	Jan-Apr 2023	NPTEL Online Certification	NPTEL-IIT, Kharagpur	Elite

University Results (Pass Percentage: 95%-100% only)

Sl. No.	Faculty Name	Subject Name	Class	Pass Percentage
1.	Mrs. S. L. Jothilakshmi	CS8791-Cloud computing	IV CSE A	98%
2.	Dr. T. S. Sasikala	BA4027 & Datamining for Business Intelligence	II MBA	96 %
3	Mrs. V. Thanammal Indu	CS8083-Multicore Architechtures and Programming	IV CSE B	96%

Students Achievements:

- Mr. Subkishan and Mr. Anant Boojesh secure runner up for men's handball tournament in anna university **Zonal -19 Handball Tournament** held on 30-11-2022.
- Ms. T. Padmapriya and her team secure the first position (winner) in **Zonal-19 Anna university Chess tournament**.
- Mr. J. P. Gohul, Ms. H. A. Ashritha, Mr. J. Ashik Sinha, Mr. K. B. Akash from the Department of CSE of Amrita College of Engineering and Technology won **First prize** in **Nalaiya Thiran Tech Showcase South Zone Regional Final** held at National Engineering college, Kovilpatti on 03-03- 2023.
- Ms. M. I. Sridevi, Mr. P. Yogesh, Mr. M. Mahalingam, Mr.VishnuMurugan,Mr. I. Sunil from the Department of CSE of Amrita College of Engineering and Technology won **Third prize** in **Nalaiya Thiran Tech Showcase south zone regional final** held at National Engineering college, Kovilpatti on 03-03-2023.
- Ms. S. Rebhisha, Mr. B. Sharan, Ms. R. Nivetha, Ms. M. I. Sridevi from the Department of CSE of Amrita College of Engineering and Technology got selected and received of Rs.7500 for **TNSCST** Project held by the colleges in Kanyakumari District Engineering Stream on 03-03-2023.
- Mr. P. Esakkiraj, Mr. K. Kishore from the Department of CSE of Amrita College of Engineering and Technology got second prize in pictoword held on 11-03-2023 at Ponjesly College of Engineering in INPHORIA 2K23.
- Mr. K. Kishore, Ms. K. Abinaya, Mr. P. Esakkiraj, Ms. R. K. Aiswarya, students of II CSE A had participated in KUMARI HACKATHON 23 and attended 36 hours of hackathon finals at MAR Ephraem College of Engineering and Technology and received appreciation certificate from hon'ble minister Mr. T. ManoThangaraj and Mr. P. N. Sreedhar district collector of Kanyakumari district.

Students getting appreciation from Hon'ble minister

- Ms. A. Sophia, Ms. R. Priyadharshini from the Department of CSE of Amrita College of Engineering and Technology got second prize in paper presentation held on 11-03-2023 at Ponjesly college ofengineering in INPHORIA 2K23.
- Mr. M. Praveen, Ms. K. J. Vibisha from the Department of CSE of Amrita College of Engineering and Technology won first prize in Mobile app development during 24th institution day celebrationof our institution.
- Ms. R. Priyadharshini from the Department of CSE of Amrita College of Engineering and Technology got first prize in musical competition group song during 24th institution day celebration of our institution.
- Ms. R. Priyadharshini from the Department of CSE of Amrita College of Engineering and Technology got second prize in musical competition group dance during 24th institution day celebration of our institution.

Students Corner:(Technical)

AI AND BIGDATA IN AUTOMOBILE INDUSTRY

Introduction

Artificial Intelligence (AI) has had a clear impact on many business sectors, but it is particularly powerful in the manufacturing and automotive industries. The world is seeing a continued increase in the demand for connected vehicles and smart technologies such as voice and image recognition. The result is an industry that will continue to rely on both AI and automation in the design, production, and use of automobiles. Electric and Low-Emission VehiclesAI is also helping engineers to develop the next generation of electric and low-emission vehicles. Learning models that can rapidly predict how batteries will respond under different conditions, engineers are iterating on fast-chargingtechnology.

Vehicle Design and Testing

With artificial intelligence for cars, automotive engineers can generate models that perfectly mirrorevery aspect of the vehicle design and test the vehicle under realistic, dynamic .

scenarios long before it's built.

Manufacturing Equipment

AI can also help in preventing costly equipment breakdowns that install production by using data from background noise, vibrations, and more to predict when machinery will need maintenance.

Big Data in the Automotive Industry

Big data in the automotive industry can include everything from data on consumer behaviour and preferences to data on driving patterns, locations, and more coming in from cars on the road

- Creating Highly Targeted
- Marketing Campaigns
- Delivering Cars Consumers Want
- Recall Readiness
- Management Managing Supply Chain Logistics

Working of bigdata with AI

By
Ms. P. M. Subishna
II Year B.E CSE

EDGE COMPUTING

Edge Computing:
Edge computing is an emerging computing paradigm which refers to a range of networks and devices at or near the user. Edge is about processing data closer to where it's being generated, enabling processing at greater speeds and volumes, leading to greater action-led results in real time.

Importance of edge computing:
Much of today's computing already happens at the edge in places like hospitals, factories and retail locations, processing the most sensitive data and powering critical systems that must function reliably and safely. These places require solutions with low latency that do not need a network connection. What makes edge so exciting is the potential it has for transforming business across every industry and function, from customer engagement and marketing to production and back-office operations. In all cases, edge helps make business functions proactive and adaptive often in real-time leading to new, optimized experiences for people.

Edge allows businesses to bring the digital world into the physical. Bringing online data and algorithms into brick-and-mortar stores to improve retail experiences. Creating systems that workers can train and situations where workers can learn from machines. Designing smart environments that look out for our safety and comfort. What these examples all have in common is edge computing, which is enabling companies to run applications with the most critical reliability, real-time and data requirements directly on-site. Ultimately,

this allows companies to innovate faster, stand up new products and services more quickly and opens up possibilities for the creation of new revenue streams. What makes edge so exciting is the potential it has for transforming business across every industry and function, from customer engagement and marketing to production and back-office operations.

Edge computing combined with other technologies
Other technologies like AI and blockchain also make edge more powerful. For example, when AI acts on data at the edge, it reduces the need for centralized compute power. Edge also makes blockchain better as more reliable data leads to greater trust and less chance of human error. Data can be captured and relayed directly by machines in real-time, and the increased use of sensors and cameras on the edge means more and richer data will become available to analyze and act on. Edge is also leading a revolution in automation, moving from systematic processes in closed, controlled environments like factories to complex performances in open, uncontrolled environments like agriculture.

Edge computing challenges and opportunities
Organizations looking to realize the benefits of edge computing sometimes face barriers to adoption. Determining the right edge strategy is not easy, but it's important to experiment continually refining the approach to set your business on the path toward success. The most common challenges we see are:

➢ Lack of standard and integrated architectures
➢ Fast-moving ecosystem with multiple tech options
➢ Unrealized business value at the edge
➢ Innovation fatigue and pilot purgatory
➢ Unique security challenges at the edge

Working of Edge Computing

By
Ms. V. K. Archanaa
II Year B. E. CSE

Students Corner:(Art)

Ms. C. S. Meenu
II Year B. E CSE

Ms. R. Mothika
IV Year B. E CSE

Placement Training

➤ Students of II year B.E(CSE) & III year B.E(CSE) have attended Aptitude & Soft Skills Training from 12.02.2023 to 16.02.2023. Resource Person: Trainers from M/s. INNATETALENT, Chennai.

Placement Details:

Sl. No.	Student name	Company name
1	Mr. S. K. Abhaya Dev	M/s. TATA Consultancy Services Limited, Chennai & M/s. VDart Inc,Trichy
2	Ms. R. Nivetha	M/s. TATA Consultancy Services Limited, Chennai
3	Mr. K. Aswin	
4	Ms. G. Chithambara Selvii	
5	Mr. Joel Paul	
6	Ms. M. Nagadevi	
7	Mr. A. R. Namit	
8	Ms. V. Shalini	
9	Ms.Jancy T. Raj	
10	Ms. K. J. Vibishaa	
11	Mr. C. P. Adithyan	
12	Ms. S. S. Thanya	
13	Mr. R. S. Anand Boojesh	M/s. VDart Inc,Trichy
14	Ms. V. T. Akshaya	
15	Ms. H. A. Ashritha	
16	Ms. V. A. Athira	
17	Ms. V. S. Harshavardini	
18	Ms. M. Nivethitha	
19	Mr. K. B. Varun Krishna	
20	Ms. M. I. Sridevi	M/s. Banibro IT Solutions Pvt. Ltd., Chennai.
21	Mr. I. Sudhan	
22	Ms. R. K. Praveena Pothi	
23	Mr. P. Yogesh	

24	Mr. C. P. Adithyan	
25	Mr. G. Ananthapadmanabhan	M/s. AVASOFT, Chennai
26	Mr. R. Ajin	
27	Mr. M. Pravin	
28	Mr. J. Ram Kishore	
29	Ms. M. I. Sridevi	
30	Ms. K. J. Vibishaa	
31	Ms. V. A. Abinilla	M/s. Terv,Chennai
32	Ms. V. Atshayaa	
33	Mr. S. Bala Chandran	M/s. Focus Edumatics Pvt. Ltd., Coimbatore & M/s. CRUD Operations, Chennai.
34	Ms K. K. Kaneeshma Laj	
35	Ms. V. S. Harshavardini	
36	Ms. V. T. Joohib Pravitha	M/s. Focus Edumatics Pvt. Ltd., Coimbatore
37	Mr. R. Pranav	
38	Mr. B. Gokul	
39	Mr. E. Ezhil Arasu	
40	Mr. E. S. Abino Amriy	
41	Mr. M. Ajay	
42	Mr. T. Ajith Kanna	
43	Mr. K. B. Akash	
44	Ms. H. V. Bharathi	
45	Mr. S. Gokul	
46	Mr. K. Naresh	M/s. CRUD Operations, Chennai.
47	Mr. M. Maha Lingam	
48	Ms. R. Mothika	
49	Mr. B. Sharan	
50	Mr. A. Shibu	
51	Mr. S. B. Shinumon	
52	Mr. I. Sunil	
53	Ms. V. M. Abinila	M/s. Zoho Corporation Private Limited, Chengalpattu.
54	Mr. Vishnu Murugan	M/s. PIT Solutions Pvt. Ltd.,Trivandrum.
55	Ms. R. Mothika	