

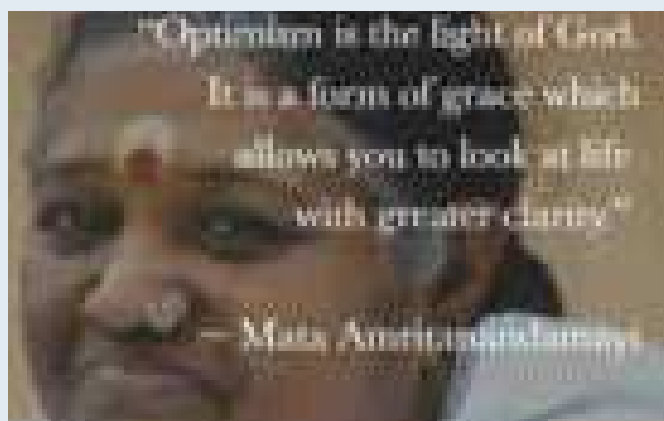


Kriti

THE CAMPUS NEWSLETTER

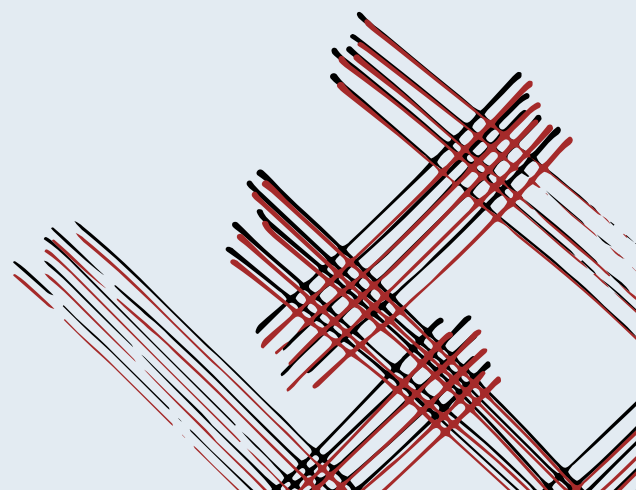


Amrita School of Engineering, Bengaluru.



NOVEMBER 2021

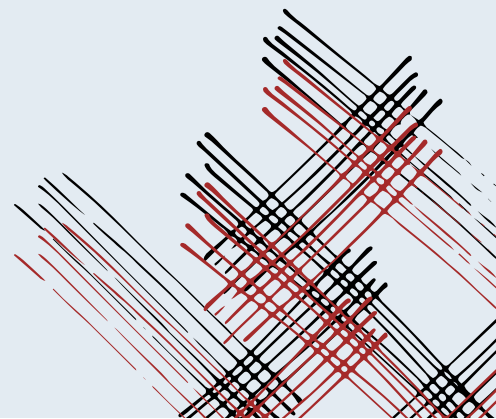
Volume 13, Issue 4



School Highlights

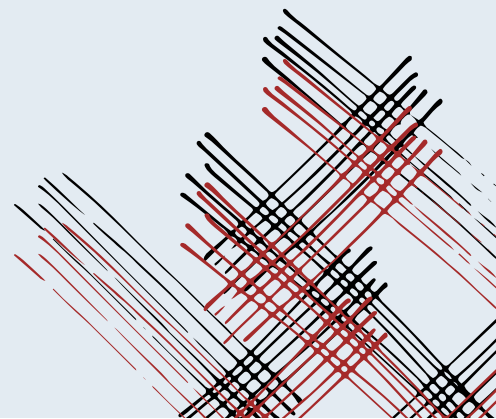
Kannada Rajyotsava

A grand event was organized on the 1st of November to celebrate Kannada Rajyotsava. The event commenced with a speech by Dr.R.S.S Rao on the history of Karnataka . Next, the Raga club took the spotlight. Manogna (II ECE A) sang the state song and Aditya Ram (II ECE B) sang Gandhada Gudi. Dharohar club performed a skit to explain the state flag, the significance of the Kempe Gowda statue, and his contribution to the military, the Vijayanagara empire, Tenali Rama, and many more. They played a song to portray Karnataka's heritage. Mr. Manish Rajan Walvekar (Amrita Darshanam) recited a beautiful Kannada poem. Abhinaya, the drama club, enacted a skit to narrate the story of Rani Chennamma, a brave and bold queen. The quiz club conducted a quiz on Karnataka's scholars, freedom fighters, and monuments. Narthana expressed their respect and gratitude for the state through a dance. Dr. Sriram Devanathan, in his address, appreciated the effort of the organisers and all the participants. The event concluded with the state anthem.





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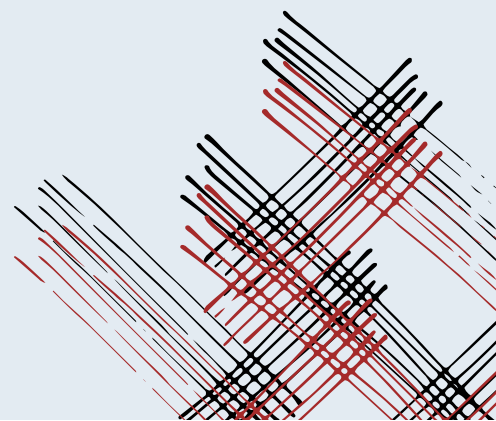


Deepa Alankar

On 1st November, SPICMACAY-ASEB hosted an online event for four days titled “DEEPA ALANKAR”. The event had two categories. The first one was to decorate diyas. And the second one was to arrange diyas based on the theme related to Indian culture. Finally, the winners from each category were announced.

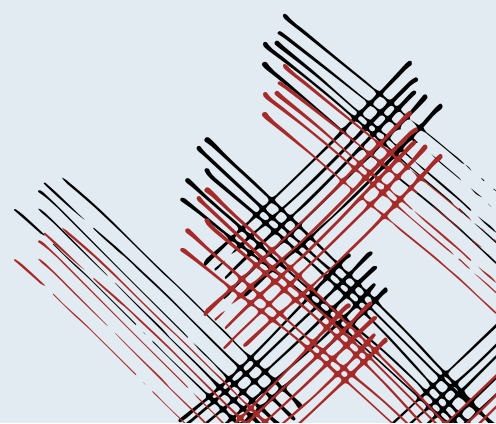


“The tiny flame that lights up the human heart is like a blazing torch that comes down from heaven to light up the paths of mankind. For in one soul are contained the hopes and feelings of all Mankind.”
— Khalil Gibran



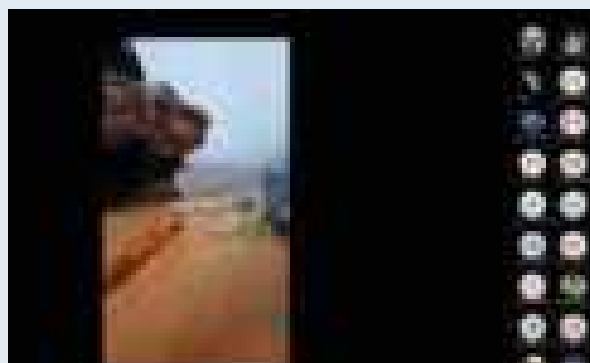


Slide 2: Complete The Program To Find Head Of The List By Completing The Missing Statement And Print Statement



SUBMARINERA- The Squad Club

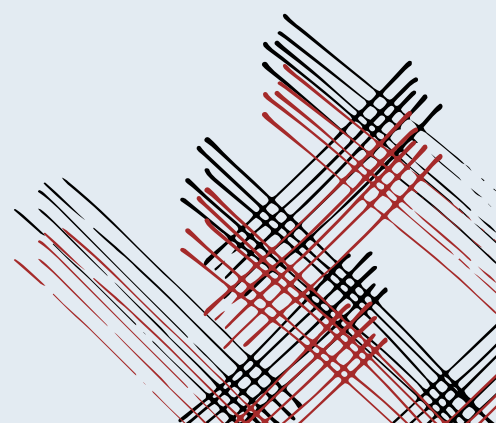
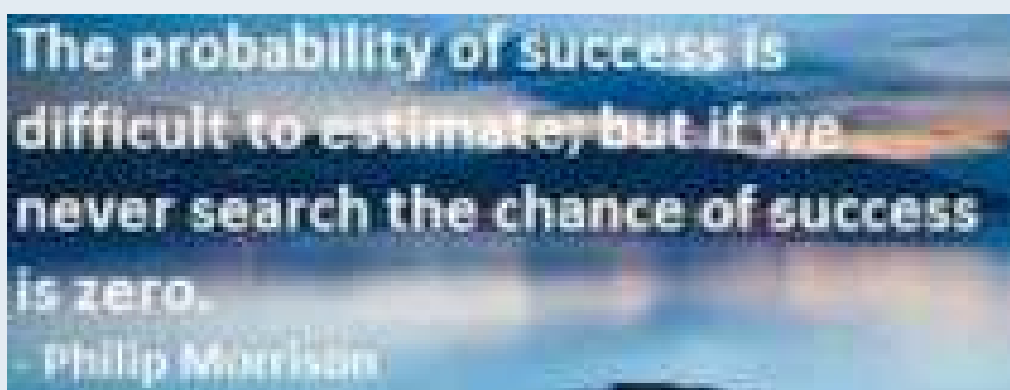
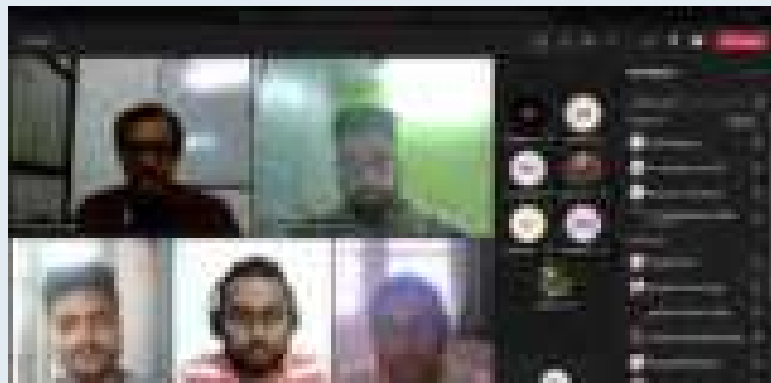
The Squad club in collaboration with Ingenium conducted “SUBMARINERA” on the 23rd. There were around 35 participants. Teja Sree Cheguri (III EAC) started the event with a brief introduction to the Submarines. The event had three segments. In the first segment, Putluru Vishnu (II CSE) and Basavadeepthi H. M. (II AIE) spoke about the history and the number of submarines owned by India. They also briefed on the major operations the submarines were involved, and mentioned about the future projects. The second segment was a quiz on submarines. The third segment was led by Keshava Vardhan (II ME) from Ingenium. He listed down different types of submarines and explained the parts of a submarine (pressure hull, outer hull, ballast tanks), diving, surfacing, and the principle behind it. Sahil Singh (III ME) spoke about the navigation system. Subramanya R. Bhatt (III ME) explained the concepts of the Inertial Navigation System, RADAR, and SONAR. Sahil Singh had an interactive session with the participants where he played a demo video of making a basic submarine and requested them to try making the same.





Sequential Decision making with Object Orientation

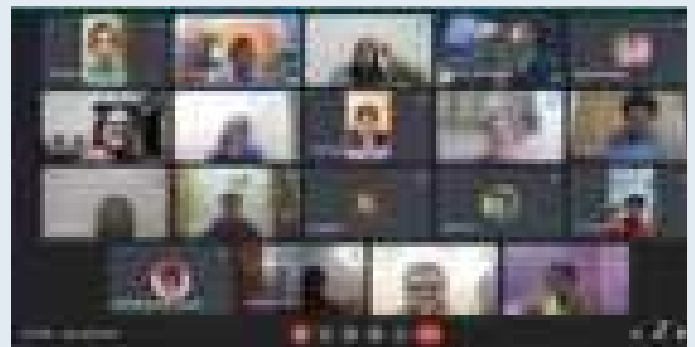
On 25th November, IEEE conducted an event called a talk on "Sequential Decision making with Object Detection". There were 20 participants. Dr. Manoj Kumar Panda, Assistant Professor, Dept. of ECE was the speaker. He explained Classical Probability, Axiomatic Probability, Probability as a set function, and Conditional Probability.





Development in Astrophysics

On 26th November, Vyom conducted an event named “Development in Astrophysics”. There were around 30 participants. N. Sai Aishwarya (III ECE) spoke about ancient astronomy, a few different models of the solar system proposed by various astronomers, and explained the importance of astronomy in civilization. She also spoke about the role played by India in the development of astronomy and on the opening of The Astronomical Society of India in 1910. A video on Ancient Greek Astro Astronomy was shared for better understanding. Vishnu V.M. (III ME) explained Modern Astrophysics, LIGO (Laser Interferometer Gravitational-Wave Observatory), and the classifications in modern astronomy. He concluded the event by talking about the importance of Earth and also future possibilities in astrophysics.





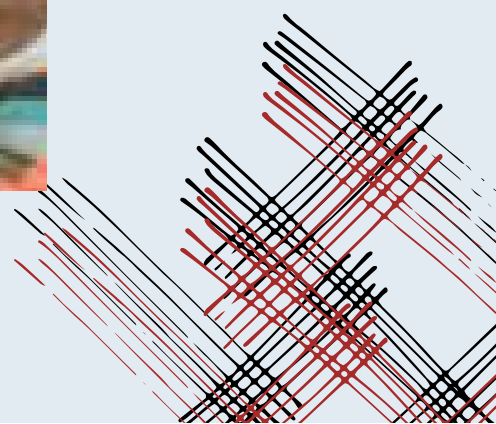
Alumni Meet 2021-22

The 7th Alumni meet of Amrita School of Engineering, Bengaluru, took place on Saturday, 27th November 2021. Ms. Sreevidya B., Assistant Professor (CSE) welcomed the gathering, and the event started with lighting of the lamp and a soulful rendition. Dr. Supriya M., Associate Professor (CSE) and Faculty Coordinator for Amrita Alumni Chapter, Bengaluru, welcomed the gathering of over 200 alumni. The meet happened on a hybrid mode facilitating a few alumni to join online. Dr. R.S.S. Rao, the Vice Principal, gave some valuable lessons to the alumni and emphasized on the importance of being humble. There was a college trivia quiz conducted by the teachers to help the alumni relive a few moments of yore. Anagha, an alumna, graced the event with a beautiful Bharatanatyam dance. A collage of events as a video presentation made the air nostalgic. During the meet and greet event, the Chairmen of EEE, ME, ECE invited the alumni of their respective departments, and had an informal conversation with them that gave the gathering an insight into the past and present life of each alumnus. The Heads also spoke about their department, and urged the alumni to be part of various initiatives taken by them.





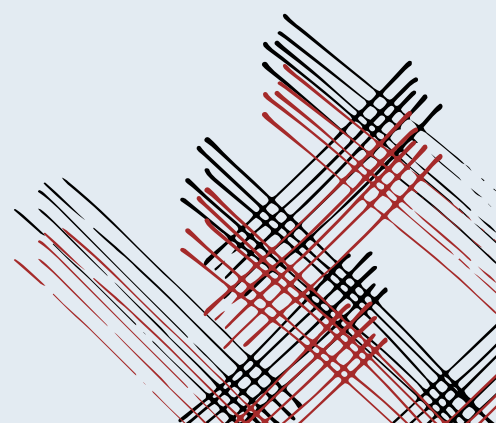
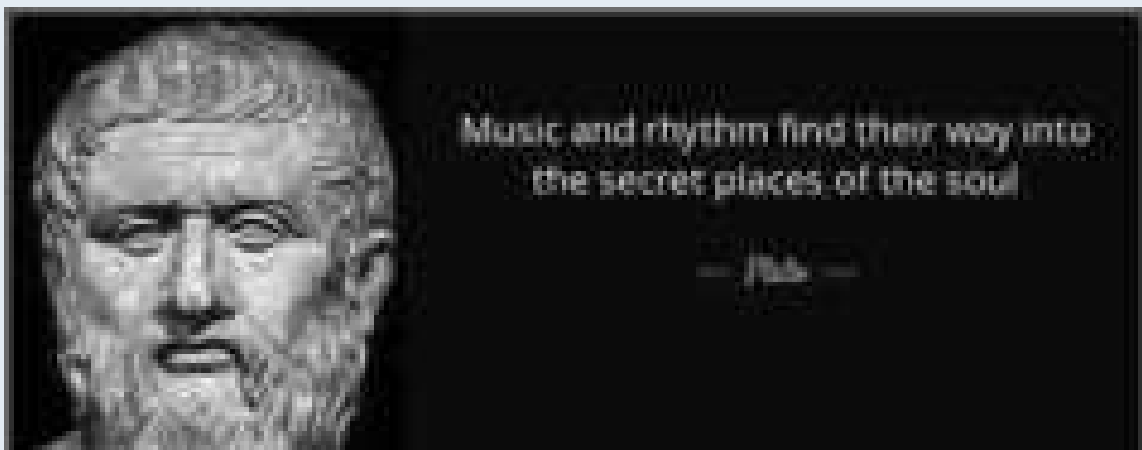
Captain Sood, CIR Head, spoke about students' attachment to their college and their contribution to CIR. There was a colorful cultural extravaganza by both the alumni and the students. Dr. Sriram Devanathan, the Principal, had a lively discussion with the alumni as a closing note to the event. He engaged them with ideas like buddy system and alumni mentoring, and mentioned that the alumni are always welcome to be a part of any event that happens in the college. With the assurance that this bonding between the alumni and the alma mater would keep growing, the meet ended with a buffet lunch. The alumni later went around the campus, met their teachers and captured the moments to be carried as memories.





Rhythm in Motion

Narthana conducted “Rhythm in Motion” and uploaded the video on its Instagram page (narthana_ase). This event was conducted exclusively for the second and third year students. The participants were grouped into teams with one third-year and two second-year students in each team. There was The theme was “Constellations”. The event commenced on 19th November, and the results were announced on 30th November. Winners were given the following titles “Best Performance”, “Most Innovative”, and “Most Popular”.





Department of CSE

Papers Presented

Name	Title	Date	Name of the Conference
Presented by: Jyotsna C. Author(s): Jyotsna C. Amudha J. Sreedevi Uday	“A Personalized Healthcare Platform for Monitoring Mental Health of a Person during COVID” (Received the best paper award)	19 th Nov 2021	International Conference on Computing and Communication Networks (ICCCN- 2021), Manchester Metropolitan University, United Kingdom
Presented by: Anupriya Shrivastava Author(s): Amudha J. Manmohan Singh Thakur Anupriya Shrivastava Shubham Gupta Deepa Gupta Kshitij sharma	“WILD OCR: Deep Learning Architecture for Text Recognition in Images”	19 th Nov 2021	“
Presented by: Arjun S. Kedlaya Author(s): Arjun S. Kedlaya Amudha J.	“An End to End System for Text Extraction in Indian Identity Cards”	19 th Nov 2021	“

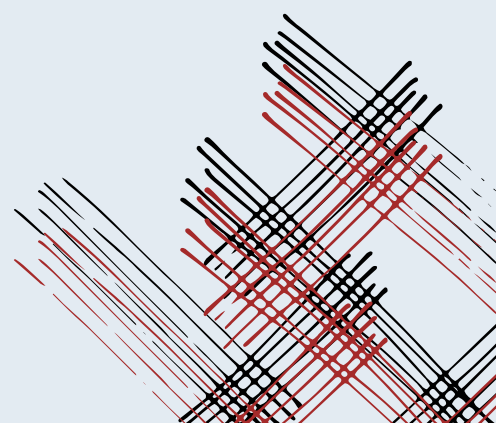


Faculty

Achievements/Participation/Recognition

Dr. Suja P.

- Reviewed a paper for Concurrency and Computation: Practice and Experience Journal.
- Reviewed a paper for IEEE Access Journal.
- Reviewed a paper for Applied Soft Computing Journal.





Department of ECE

Papers Published

Name	Title	Date	Name of the Conference
Author(s): Oscar Ferrazz Srinivasan Subramaniyan Ramesh Chinthala Joao Andrade Joseph R. Cavallaro Soumitra K. Nandy Vitor Silva Xinmiao Zhang Madhura Purnaprajna Gabriel Falcao	“A Survey on High- Throughput Non-Binary LDPC Decoders: ASIC, FPGA and GPU Architectures”	Nov. 2021	IEEE Xplore: IEEE Communications Surveys & amp; Tutorials Impact Factor 25.249



Papers Presented

Name	Title	Date	Name of the Conference
Presented By: Anusha S. Author(s): Anusha S. Bommidi Shivanath Nikhil K. Sai Manoj Kirti S. Pande	“MTCMOS 8T SRAM Cell with Improved Stability and Reduced Power Consumption”	19th - 20th November 2021	2021 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER) Organised by IEEE Mangalore Subsection Hosted by NMAM Institute of Technology, Nitte, India



Workshops/ Seminars/ Conferences/ FDPS Attended

Name	Title	Date	Organizer/Platform
Dr. Kamatchi S. Dr. Parul Mathur	“5-day FDP-SI UHV Online -AICTE Incorporating Universal Human Values in Education” (An AICTE Initiative)	28th May - 4th June 2021	AICTE Online through ZOOM meeting
Dr. M. Vinodhini Dr. N. Neelima Ms. R. Sunitha Mr. P. Satish Kumar		28th June - 2nd July 2021	
Mr. Vignesh V. Mr. Sagar B.		8th - 12th November 2021	
Ms. Sonali Agrawal Ms. Kirti S. Pande		29th November - 3rd December 2021	



Departmental Forum Activity

Introduction to Satellite Communication and its Emerging Technologies

ECCIF, the departmental forum of ECE hosted a webinar on “Introduction to Satellite Communication and its Emerging Technologies” on 13th November 2021, Saturday from 10 am to 12 pm. Mr. B. Yesobu, Scientist / Engineer – SG, ISRO, MCF, delivered a lecture on the topic. The speaker introduced the audience to Satellite Communication, its future scope, upcoming technologies in the field and advantages of the same. The session concluded with an interaction in which various questions raised by the audience were answered by the speaker. The participants of the event were around 170.

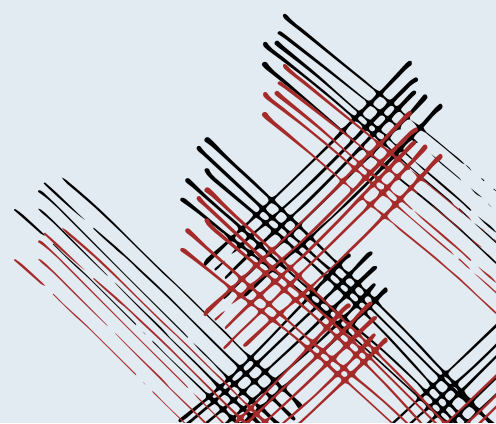




TECHMANIA

ECCIF hosted “Techmania – Firing Up the Tech” on the 26th.

Techmania highlighted various gadgets and explained the working of the components present in it. Teams formed by the executives came up with innovative ideas on The Future Technology of Electronics and Fun Events. The session included Fun Events conducted by the executives and an interaction with the First-year students. The Event received a great applause and had a participation of nearly 80 students.

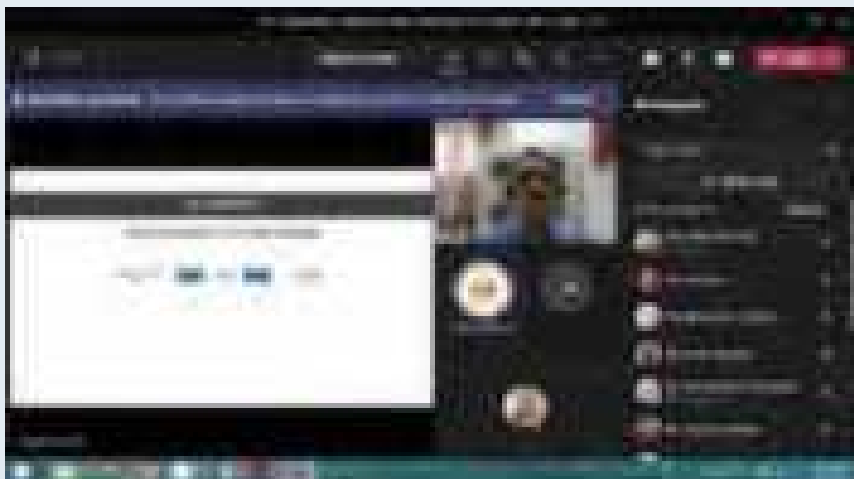




Departmental Activity

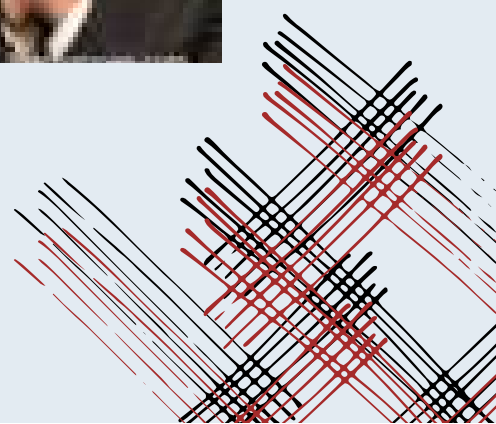
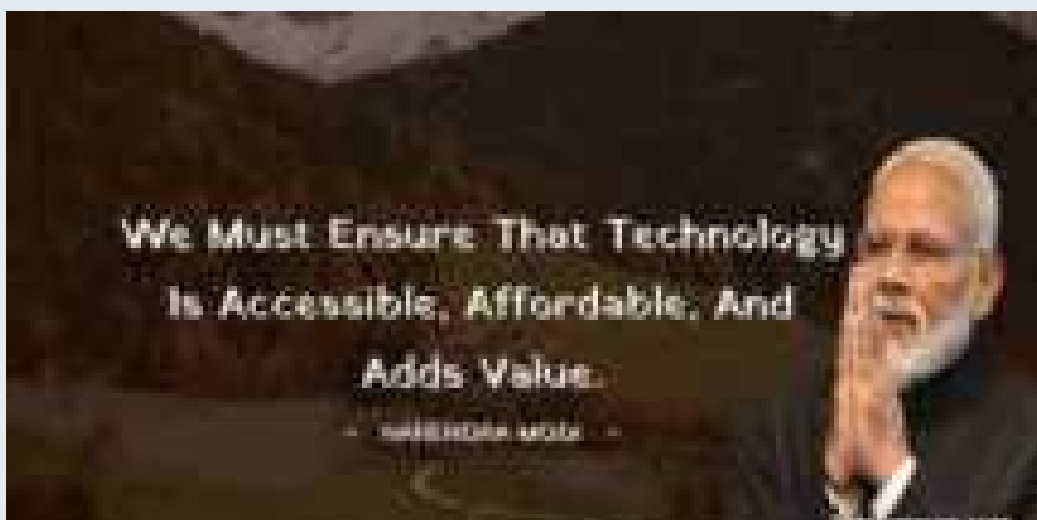
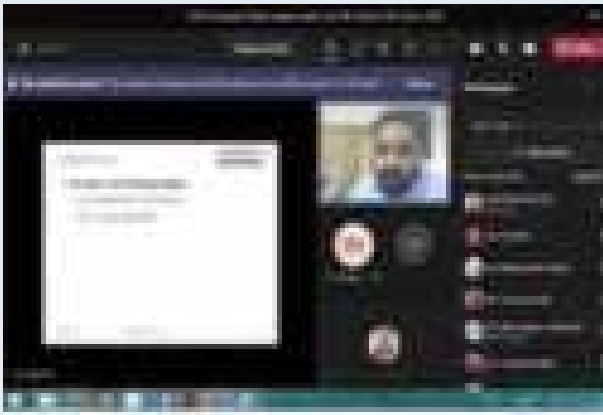
Ph.D. Symposium Series Industry Expert and Ph.D. Scholar Talk

A second talk in the Ph.D. Symposium Series was conducted on 20th, where industry experts and Ph.D. scholars working in broad areas of Engineering, Science and Languages, presented their work, interacted with their peers to learn from each other's experiences. The talk had 20 participants from various disciplines. Dr. Shiva Kumar H., Co-founder & CEO at RaGaVeRaIndic Technologies Pvt. Ltd., Bengaluru Urban, Karnataka, Mr. Rajesh M., Asst. Prof. and part time Ph.D. scholar, in the CSE dept. and Ms. Ila Rai, Ph.D. scholar in the EEE dept. were the speakers for the day.





Dr.Shiva Kumar H. elaborated on “Gift of New Abilities -gifting a new ability for visually challenged persons to access any book/document printed in Indian languages”, and Mr. Rajesh M. spoke on “Effective Localization & Communication Protocol for Mobile Robots”. Ms. Ila Rai, presented her Ph.D. work on “A robust non-linear controller design for DC microgrid to improve large signal deviation in dynamic response”.

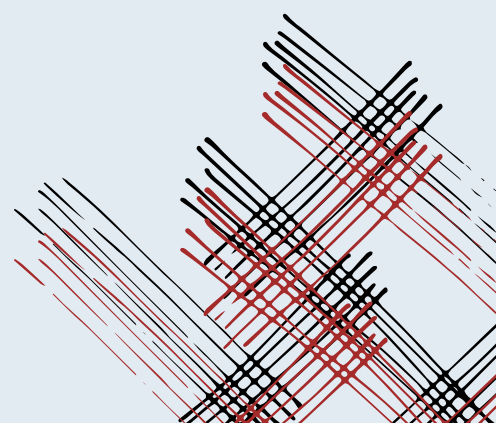




Department of EEE

Workshops/ Seminars/ Conferences/ FDPS Organized

NAME	TITLE	DATE	ORGANIZER/ PLATFORM
Dr. K. Deepa Convener	Two Day Online Faculty Development Programme, "E-Mobility: A Research Perspective Industries-Academia Interaction to foster Research"	13 th - 14 th November 2021	Dept. of EEE ASEB, Microsoft Teams Platform
Ms. Sudha Yadav Co- convener			



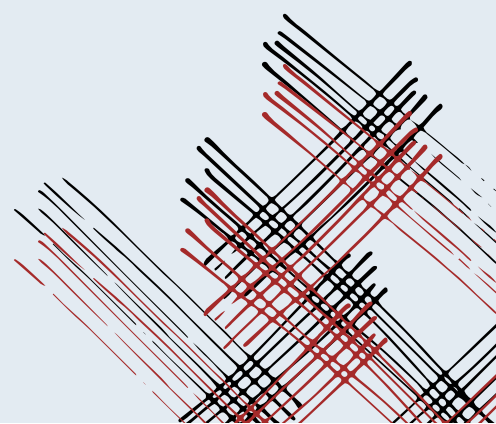


Faculty

Achievements/Participation/Recognition

Dr. K. Deepa

- Handled a session titled “EV Charging Infrastructure: Research Challenges and opportunities” on 15th in the FDP on “Transition to Electric Vehicles: Challenges and Opportunities” jointly organized by the division of Electrical and Electronics Engineering and Division of Mechanical Engineering, School of Engineering, Cochin University of Science and Technology under the aegis of TEQIP phase II during 8th - 19th November 2021.
- Reviewed 3 papers for IEEE SPICES 2022: IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems 2022, Mar Baselios College of Engineering and Technology, Thiruvananthapuram, India, 10th - 12th March 2022.

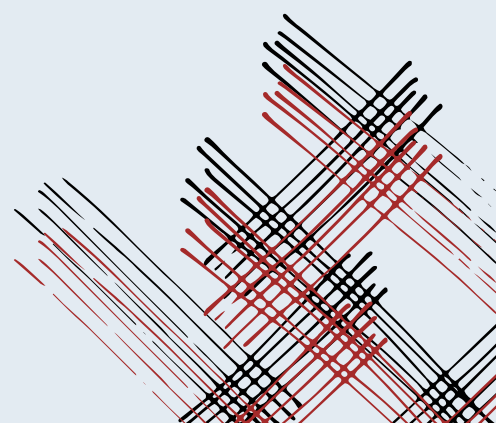
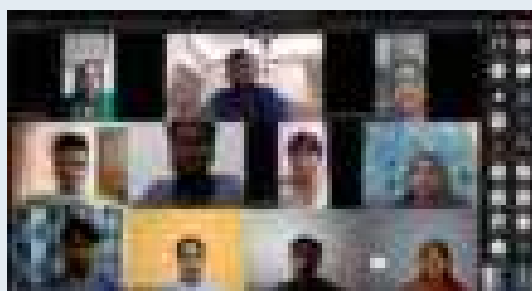




Departmental Forum Activity

Stepping into the world of Electric Vehicles

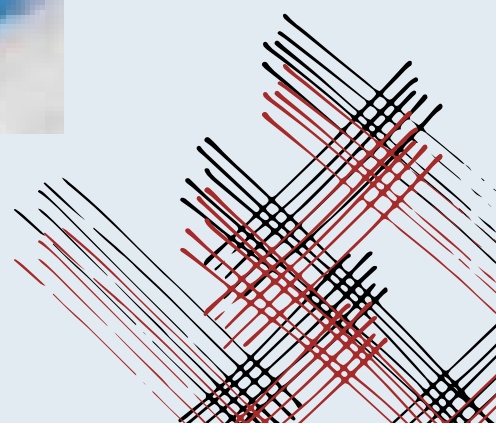
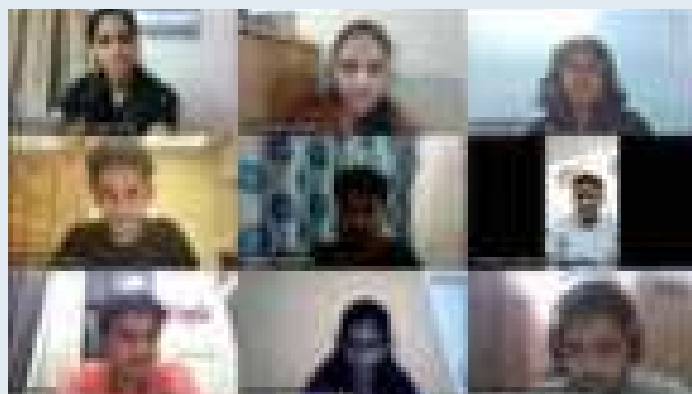
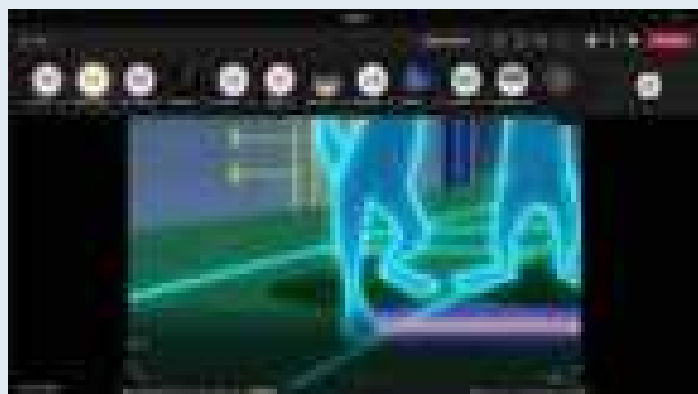
Vidyuth hosted “Stepping into the World of Electrical Vehicles” on the 14th. The speaker, Mr. K. S. Saran, a Junior Engineer in Indian Railways, and a member of various IEEE teams & chapters, started the session with an insight into the history of batteries. He explained electric cars and their components, the different types of batteries, their pros & cons. Next, he discussed the types of power trains used in e-mobility. He gave a brief note on the future impact, the current market trends, and market-related issues. The speaker concluded by stating the advantages and the challenges in this sector.





Funphilia

Vidyuth hosted an exuberant game event titled “Funphilia” on the 26th. The event had two rounds. In the first round, the participants were asked to solve a crossword related to Electrical & Electronics. The second round was Reels-Builder, where the participants had to pen down as many electrical and electronics-related words based on the video shown. Fourteen teams took part. The event concluded with the announcement of the winners.





Departmental Activity

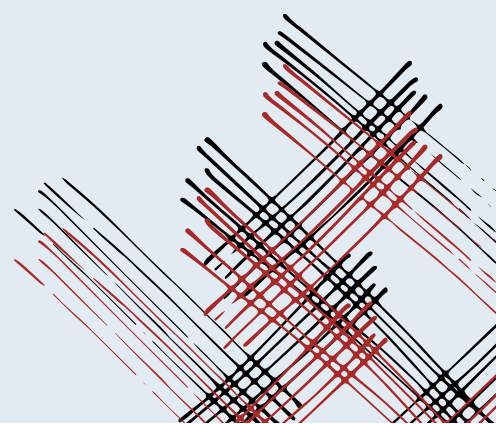
E-Mobility: A Research perspective. Industries-Academia Interaction to foster Research

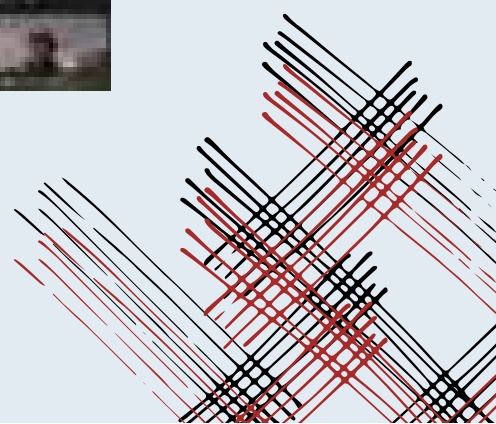
The 2 Day FDP titled “E-Mobility: A Research Perspective, Industries-Academia Interaction to foster Research” conducted on 13th and 14th was an initiative of E-mobility TAG of the dept to evoke desire among enthusiastic researchers who wish to play a major role in the scientific progress of Smart EVs. Its objective was to bring together highly ambitious minds to acquire best and latest knowledge in the field of Smart EVs, and also provide opportunity to the students and research scholars from all over the nation along with industry professionals and academicians to discuss and exchange their views. The FDP focussed on discussions and the exchange of new developments and ideas in Smart EVs. The FDP primarily aimed at graduate and post graduate students, and young professionals who intend to pursue Ph.D. program. The FDP inaugural function had Mr. Jabez Dhinagar, Vice President at TVS Motor Company, Krishnagiri, Tamil Nadu, India as the chief guest. He is the Chair of Harmonisation group in International Motorcycle Manufacturers Association (IMMA) and also Co-Chair of Electric Mobility group of SIAM. He shared his experiences in his talk and interacted with the students. The invited speakers and their respective topics are tabulated below.



Speakers	Topics
Dr. T. Porselvi, Prof. EEE Dept. Sri Sai Ram Engineering College, Chennai.	Smart Electric Vehicle: Research challenges and opportunities.
Mr. Aneesh Rajendran, Energy Technologist, Energy Management Centre, Kerala.	Prospects of E-Mobility based on Kerala sector's experience & learnings.
Dr. A. Paventhan, Director (R&D), ERNET, Govt. of India,	Internet of Things (IoT) Enabled Monitoring of Smart EVs
Dr. Tolga Ozer, Asst. Prof. EEE Dept. Afyon Kocatepe University, Turkey.	Active-Passive Battery Management System Design and Implementation
Dr. Sasi Kottayil, Adjunct Prof. Tezpur University, Assam.	EV charging and related issues
Ms. Rashika, Cloud Expert, PWC, Bengaluru.	Cloud Computing for Smart EVs
Dr. Chandrasekhar B. Technical Lead, Industry Expert, Bengaluru,	Cyber Security issues in Smart EVs

The Chief Guest for the valedictory function, Dr. R. Harikumar, Director of Energy management Centre (EMC), Govt. of Kerala, India spoke about the fields of energy efficiency and renewable energy. The day concluded with very interesting discussions. There was positive comments and feedbacks after and before the session.

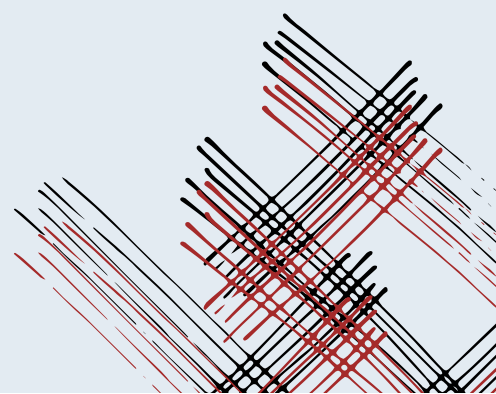






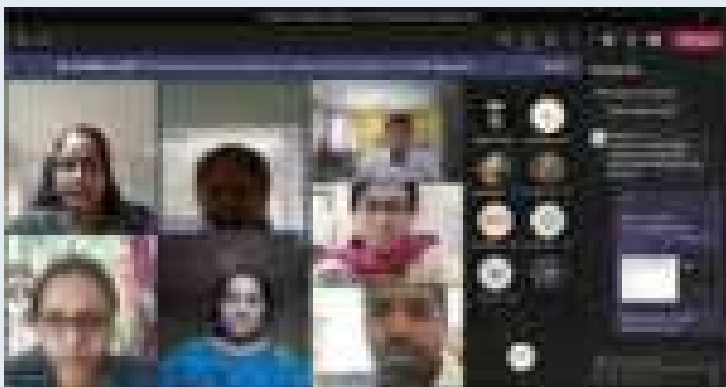
Research Colloquium

IEEE-PES & IAS of ASEB and IEEE-PELS & IEEE-IES Bangalore Chapter hosted an online national event titled “A Research Colloquium” on 26th November 2021. Principal Dr. Sriram Devanathan welcomed the chief guest and Dr. Vidya H. A., Chairman, Dept. of EEE, introduced Dr. Valentina E. Balas, Prof., Dept. of Automatics and Applied Software, Faculty of Engineering, “Aurel Vlaicu” University of Arad, Romania . The speaker explained the optimization method for highway traffic with traffic indicators and constant time to collision criteria. It was an active session and there were 84 participants in the event. The topics and the speakers of the colloquium are listed in the table on the next page. The valedictory session of the national event was held on 27th. The Chief Guest of the valedictory function was Dr. Ing. Yashodhan Gokhale. He is the Vice President of Business Development, Octillion Power Systems, Pune, India. Dr. Ing. Yashodhan Gokhale spoke about the recent trends in EV charging and its architecture; recent development in batteries and charging. The event ended with a thanking note by Dr. K. Deepa.





Speakers	Topics
Engr. Ahmed G. Ismail, Energy Management Researcher and consultant for several projects in KSA and Egypt.	Integrated energy management opportunities and challenges.
Dr. Fatih Serttas Assistant Professor, Electrical Engineering Department Afyon Kocatepe University, Turkey.	Partial Discharge Phenomena and Classification of High Voltage Cable Defects
Dr. Kaushik Basu, IEEE PELS Bangalore Chapter Chair.	Emerging Research trends in the area of “Power Electronics”
Dr. Umashankar Subramaniam, Professor and Distinguished Researcher, Renewable energy lab, college of engineering, Prince Sultan University, Riyadh, Saudi Arabia, IEEE PES EXECOM Member, Saudi Arabia.	Research Perspectives on green Energy Charging Infrastructure
Dr. Anushree Ramanath, Senior Systems Engineer, Enphase Energy Inc., California, United States.	Research Perspectives in Renewable Energy Domain
Ms. Bhadra R. Warriar Research Scholar, Amrita School of Engineering, Coimbatore (System Design Engineer, Infineon Technologies AG, Warstein, Germany).	Webinar on Signal Decomposed Synchronizer for Inverter Dominated Microgrids
Dr. Sanchari Deb, EUTOPIA SIF Postdoctoral Fellow, Power and Control Laboratory of School of Engineering, University of Warwick, UK.	Charging Infrastructure Planning For Electrical Vehicles

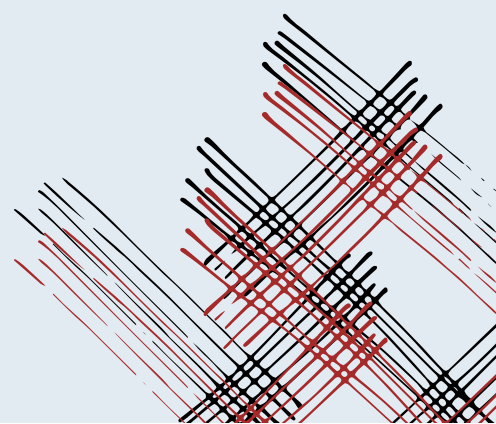




Department of ME

Papers Published

INTERNATIONAL JOURNAL			
NAME	TITLE	Date	NAME OF THE PUBLICATION
Author(s): G.B.Veeresh Kumar R. Pramod R. Hari Kiran Reddy P. Ramu B. Kunaal Kumar Pagidi Madhukar Murthy Chavali Faruq Mohammad Sachin K. Khiste	“Investigation of the Tribological Characteristics of Aluminum 6061- Reinforced Titanium Carbide Metal Matrix Composites”	Nov 2021	ICSMMT 2021; 4th International Conference on Sustainable Manufacturing, Materials and Technologies, Coimbatore, Tamilnadu, India organized at Hotel Vijay Elanza, Avinashi Rd., Peelamedu, Tamil Nadu





Workshops/ Seminars/ Conferences/ FDPS Organized

Name	Title	Date	Organizer/Platform
Ms. Mrudula Prashanth	"Hydraulics Teaching with Simulation"	18th November 2021	Famig Technologies Online

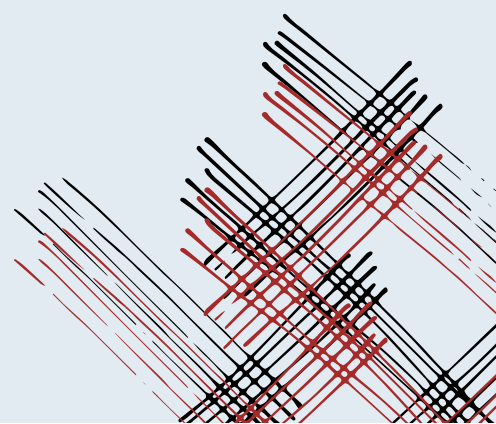
Faculty

Achievements/Participation/Recognition

• Mr. R. Pramod

- Reviewed an article for the journal Metals, MDPI Publications.
- Reviewed an article for the journal Materials, MDPI Publications.

Mr. Vinod Kotebavi was invited as a judge for a One-day national level virtual technical event THERMOFEST-2021 for the virtual technical paper & technical poster presentation competitions organized by Mechanical Department, DBCE in association with ISHRAE Goa chapter on 13th November 2021.





Department of Amrita Darshanam

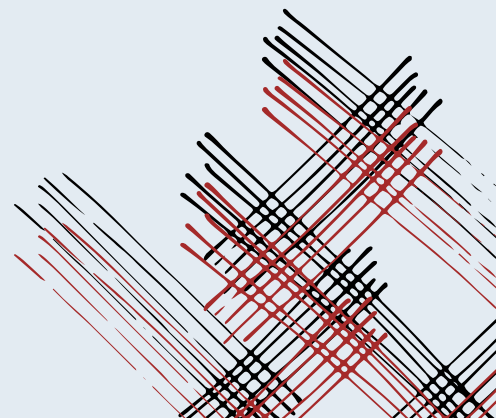
Papers Presented

Name	Title	Date	Organizer/Platform
Presented By: Tanashree Redij Author(s): Tanashree Redij Amulya Dixit	“Cultural Landscape of Deogaon: A Paradigm of Mythological and Spiritual Insights”	12 th November 2021	ICOMOS INDIA Scientific Symposium 2021, Prequel event

Faculty

Achievements/Participation/Recognition

- **Dr. Tanashree Redij** was appointed as an examiner by the executive council for evaluating the doctoral thesis of Shri Balmukund Lohia Centre of Sanskrit and Indological Studies, Tilak Maharashtra Vidyapeeth, Pune.
- **Ms. Yogita Chhatre** participated in a workshop organized by Deccan College, Pune, on – ‘The Tradition of Lexicons in Sanskrit’ from 18th October 2021 to 17th November 2021.





Everyone has been made for some particular work, and the desire for that work has been put in every heart.

-Rumi

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**Ms. Yogita Chhatre, Amrita
Darshanam**

**To business that we
love we rise betimes
and go to 't with
delight."
-Shakespeare**

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**Sic Parvis Magna
-Sir Francis Drake
"Greatness from small
beginnings"**