

SKCET Buzz

19th - 23rd DECEMBER 2022



Wishing You a Very
Merry Christmas
And a
Happy New Year.

Editor-in-Chief

Dr.J.Janet
Principal

Co-Editor

Dr.S.Venkata Lakshmi – AI & DS

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Mrs.S.MaryFabiola - S&H,
Mr.G.S.Pugalendhi - AI & DS,
Mr.M.Diwakaran - IT

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**INSTITUTIONAL
EVENTS**



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SKCET | CHRISTMAS CELEBRATION



The best way to spread Christmas Cheer is singing loud for all to hear. To perfectly kickstart the Christmas Season in style with the Perennial Catchiness, students and faculty members sparkled in the spirit of Christmas with the delightful medley of Carols. Christmas is about celebration. The celebration was filled with praise and good cheer when the students tapped for the rhythmic beat.

SKCET | CHRISTMAS MESSAGE BY PRINCIPAL MADAM



Without doubt, Christmas is a fantastic time! The promise of peace, good will and growing sense of excitement and expectation, makes this time of year very special. Principal Madam shared the theme message of Christmas and conveyed her New Year greetings.

SKCET | CHRISTMAS CELEBRATION

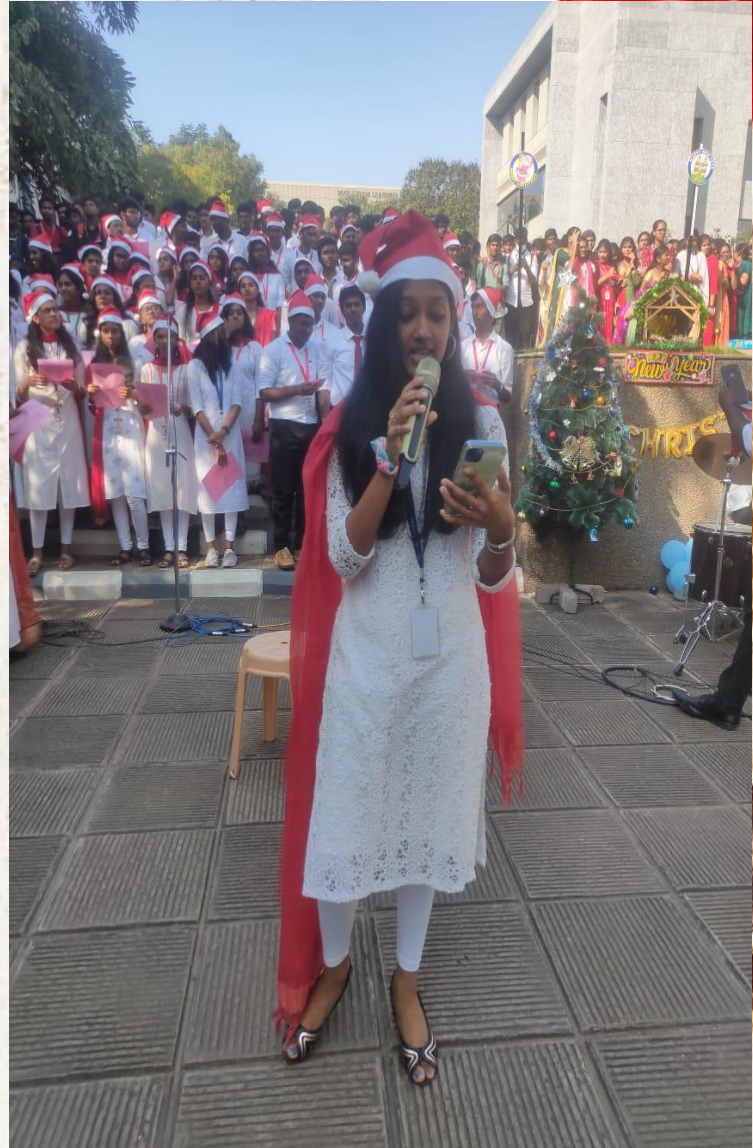


Glad Tidings of Great Joy at SKCET

It's never too late to celebrate Christmas, the festival of joy, hope, peace and Love. On this note the festive celebrations was set in motion with an array of Colourful events.

Ho!Ho!Ho! It's Christmas Time!!!!

SKCET | CHRISTMAS CELEBRATION



A great many things can be resolved with kindness, even more with laughter, but there are some things that just require cake! Christmas cakes symbolises a ritual of Christmas Celebration, specifically the act of sharing. To mark the significance of Sharing, a cake cutting was organised. Principal Madam and the students fraternity shared the cakes and their warm greetings.

Christmas- A season to share and care!

SKCET | CHRISTMAS CELEBRATION



Blasting of Santa's Sleigh! I know a man with long white beard! And Santa is his name! Christmas is incomplete without this old man's entry.
Jingle Bells, Jingle Bells, Jingle all the way!!!
Oh what fun it is to ride on a one horse open sleigh!!!

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**STUDENT
ACCOLADE**



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S&H | IDEA EVENT





Project Contest
Innovations LLP.,
Spreading Innovations

INCUBATION PARTNER











TITLE : AGRICULTURE WITH EXTENDED REALITY



TITLE : PROJECT ZERO EMISSION



TITLE : A NOVEL METHOD FOR PREVENTING AND CONTROLLING ROAD ACCIDENT USING SENSORS

RISHI PRASATH
SANJIV DHARSHAN
SARAN R
SHREYAS VISWANATH
SRIRAM ARASU T






ADITHYAN K S
CHETANA BENDALE
HINDAVI GAIDHANI
JANVI ANAND CHAURASIYA
OM SWAPNEEL SHINDE

ABDUR RAHMAN B
MOHAMED IBRAHIM S
SAYBBULLA S B
VASIM AKRAM S B


Jury Choice
AWARD

Congratulations
WINNERS


EVENT PARTNERS


Our Team




Sriram Arasu T
SKCET




Shreyas Viswanath
SKCET



Saran.R
SKCET



Rishi Prasath
SKCET



Sanjiv Darshan
SKCET

First year students of **EEE** Department have participated in an online Idea Event organized by Project Contest Innovations (PCI) LLP in Virtual Atom Symposium. The students have bagged the **Jury Choice Award** for their innovative idea.

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EVENTS

EVENTS

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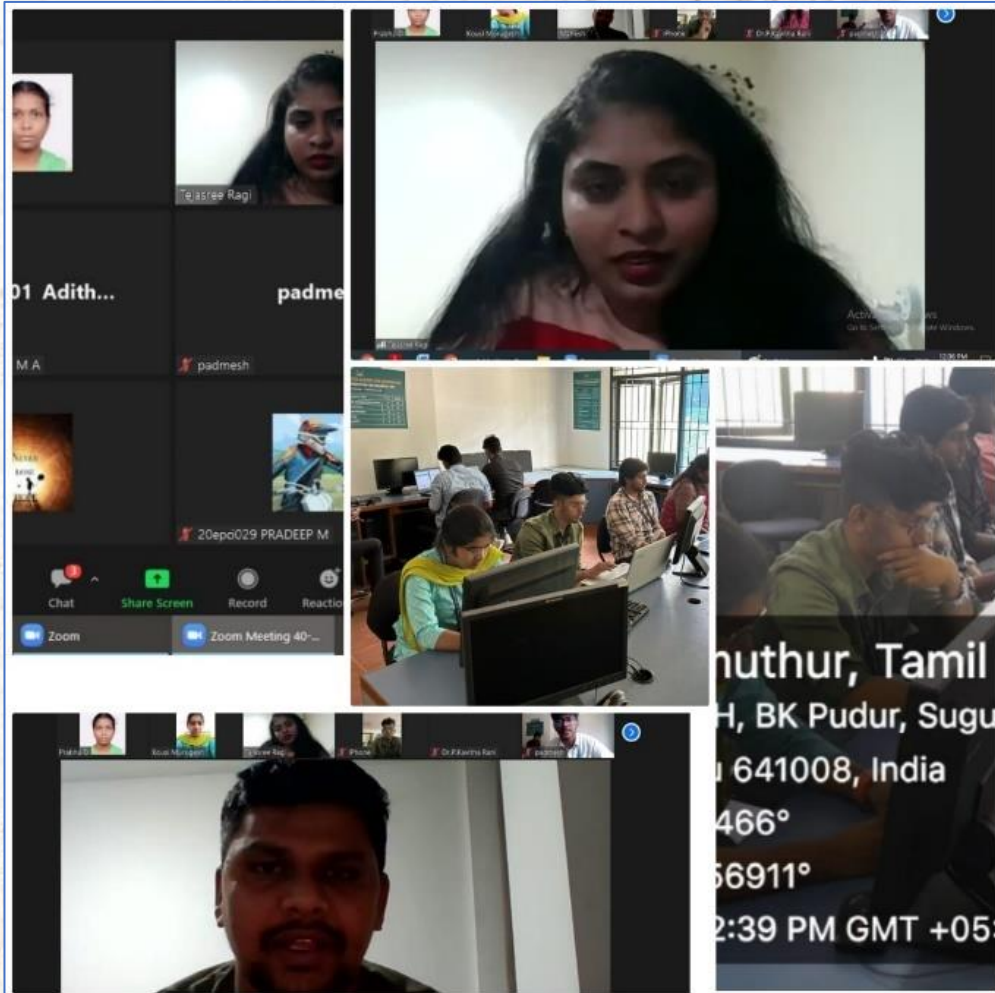
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MECH | INDUSTRIAL VISIT TO Z F WIND POWER



Second year students from the Department of **Mechanical Engineering** visited **Z F wind power Pvt Ltd**, Coimbatore (India), on 14.12.2022. ZF is a global technology company with its head office at Belgium. It has a state-of-the-art integrated gear-driven wind turbine gearbox manufacturing plant. Students were exposed to Manufacturing of Higher Tonnage components like Wind turbine housing, planet carrier, Torque arm, Ring wheel and Planet wheel, German make VMC 4 axis and 5 axis CNC machines, complete integrated industry (Industry 4.0). **Dr.N.Balaji** and **Dr.R.Soundararajan**, Faculty Members , Mechanical Engineering accompanied the students.

M.TECH CSE | KNOWLEDGE SHARING SESSION



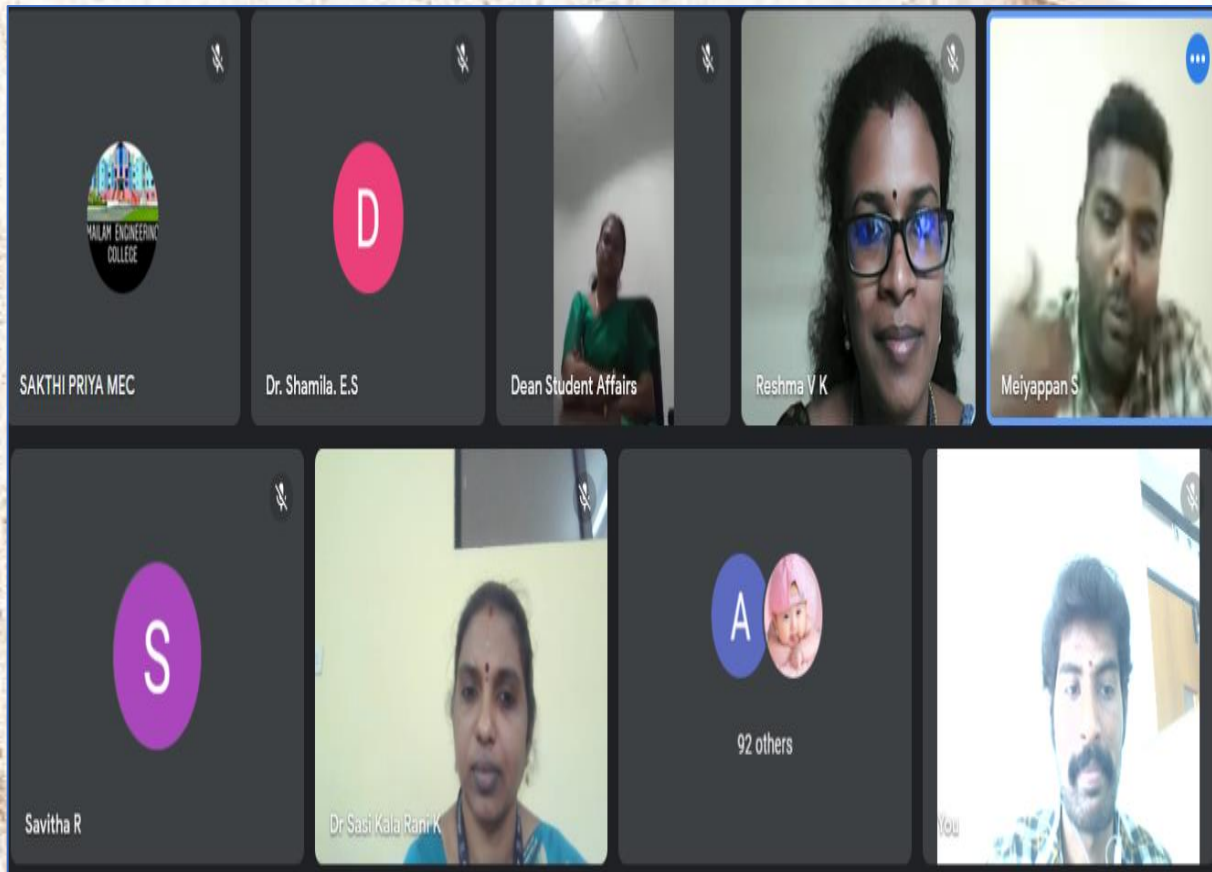
Students of **Third year M.Tech Computer Science and Engineering** had a Knowledge Sharing Session with Global University (Sheffield Hallam) Students on 19.12.2022. The invitees are **Ms.Tejasree Ragi, MS Big Data Analytics, Sheffield Hallam University, United Kingdom** and **Mr.Mahesh Motupalli, MS Computational Intelligence, Sheffield Hallam University, United Kingdom**. The Key Points discussed in the session were: views on course contents in Data analytics offered by their university with Big Data analytics course in SKCET, they were interested to collaborate and work on live projects with our students.

M.TECH CSE | HOD INTERACTION



Dr.P.Kavitharani, HoD, M.Tech CSE interacted with the First year students and educated them on the top technical skills and the learning of on demand technologies like Data Analytics, Programming and Coding, Devops, Proactive security, Connected technologies ,Quantum computing Students were highly interactive during the session.

CSE | FDP ON RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES



Department of **CSE** organized Five Days - FDP on “**Research Advancements in Intelligent Computing Technologies**”. The inaugural event of the FDP kick started with the welcome address by **Dr. K. Sasikala Rani**, HoD - CSE. **Dr.K.Ragavi**, Dean - Student affairs, SKCET delivered the presidential address. The Chief guest **Mr.S.Meiyappan**, Associate Software Developer, CTS inaugurated the great event.

CIVIL | GUEST LECTURE ON EMPLOYABILITY IN DIGITAL CONSTRUCTION



The ICI student chapter of Civil Engineering Department in association with BIM Centre of Excellence organized an Industry Expert talk on "**Employability in Digital Construction**" for the **First** year students on 20.12.2022. The resource person for the program was **Er. Krishna Raj** from BIMLABS.

Session Highlights:

- Adoption of New technology in Construction Industry
- Digital revolution in construction.
- Digital Construction and BIM
- Digital data management and controlling
- Career building in BIM

CSE | BoS MEETING



The **Department of Computer Science and Engineering** has conducted **16th BoS Meeting** for the approval of R2020 - VII Semester Core & Elective Courses, R2022 - III Semester CSE, CSE(Cyber Security) and CSD Programmes Syllabus on 21.12.2022.

BoS Members:

University Nominee: Dr.J.Raja Sekar, Professor - CSE, Mepco Schlenk Engineering College, Sivakasi.

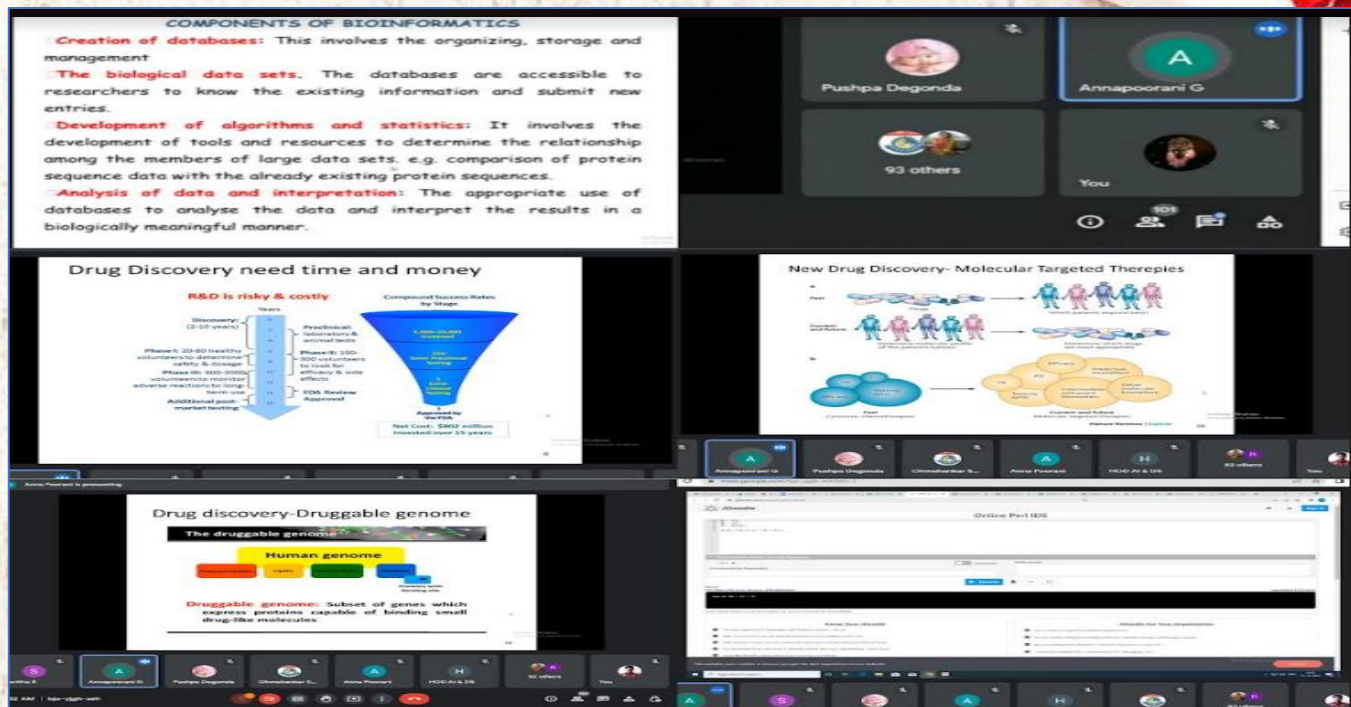
Academic Experts: Dr.R.S.Lovelyn Rose, Associate Professor - CSE, PSG College of Technology, Coimbatore.

Dr.G.Suganya, Academic Expert, Associate Professor - CSE, Vellore Institute of Technology, Chennai.

Industry Expert: Dr. Adithya Pothan Raj, Manager - Lead Architect Technology, CTS, Chennai.

Alumni Member: Mr. G. Sanjaydeep, Senior Software Engineer, Anthology Inc., Chennai.

CSE | FDP ON RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES



Session 1

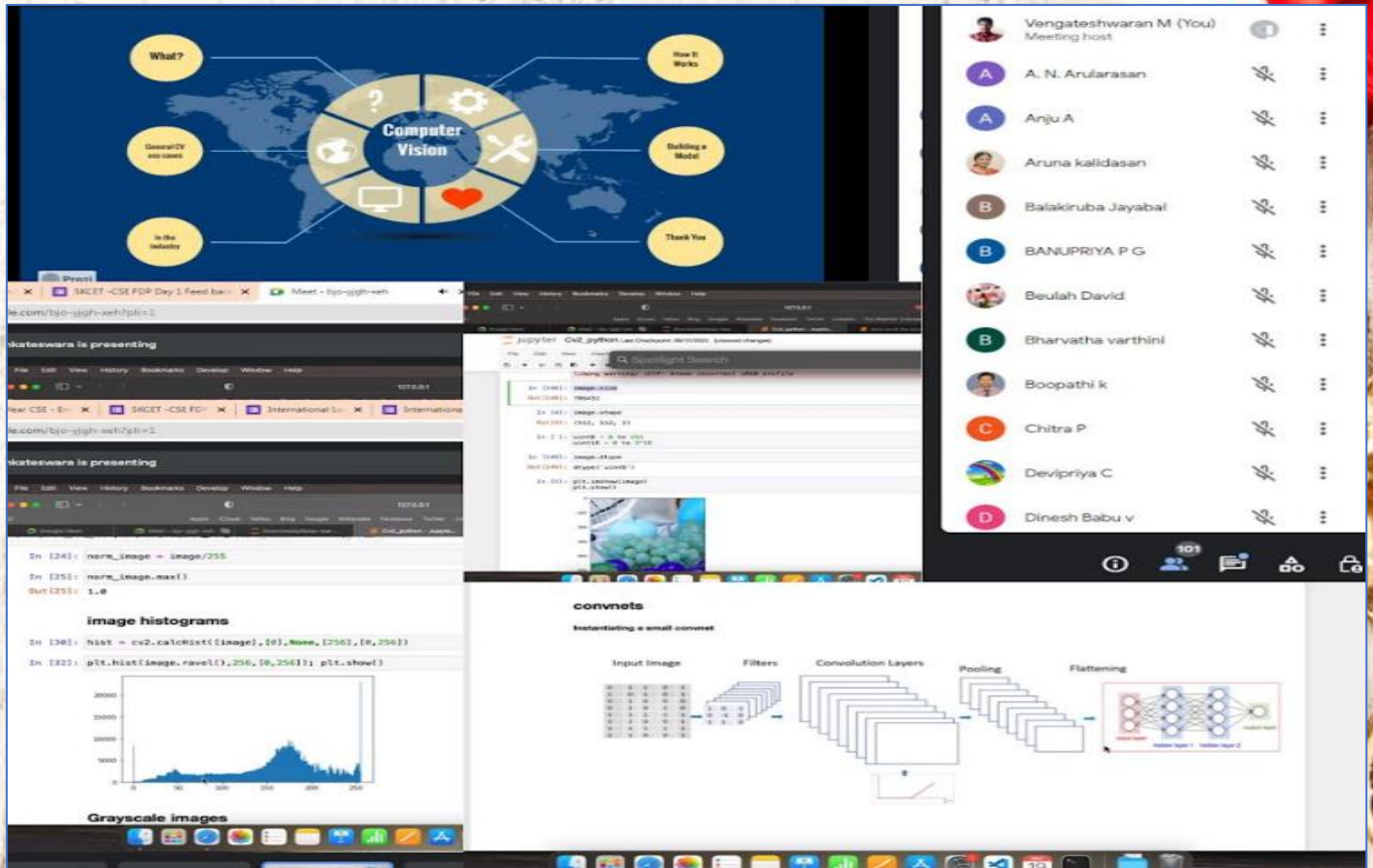
Resource Person: Dr.G.Annapoorani, HOD, CSE, University College of Engineering, Anna University (BIT Campus), Trichy, Tamilnadu.

Session Title: Bio-Informatics in Drug Design

Session Highlights:

- Overview on Bioinformatics
- Genetic Material of Life
- Information between DNA & RNA
- Replication
- Mutations & Randomization
- Drug Discovery process
- Genetic code demo with Perl online compiler
- Application & Challenges in medical sector

CSE | FDP ON RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES



Session 2:

Resource Person: Mr.Venkata Krishnan, Data Scientist, PACS Singapore.

Session Title: Recent Trends in Computer Vision

Session Highlights:

- Introduction to computer vision
- General open CV use cases with Deep learning
- Industry perspective model of visual processing
- How it works on object recognition
- Semantic Segmentation & pixel classification
- Building a model of 3D reconstruction view
- Real time application demo

CSE | FDP ON RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES



Session 1

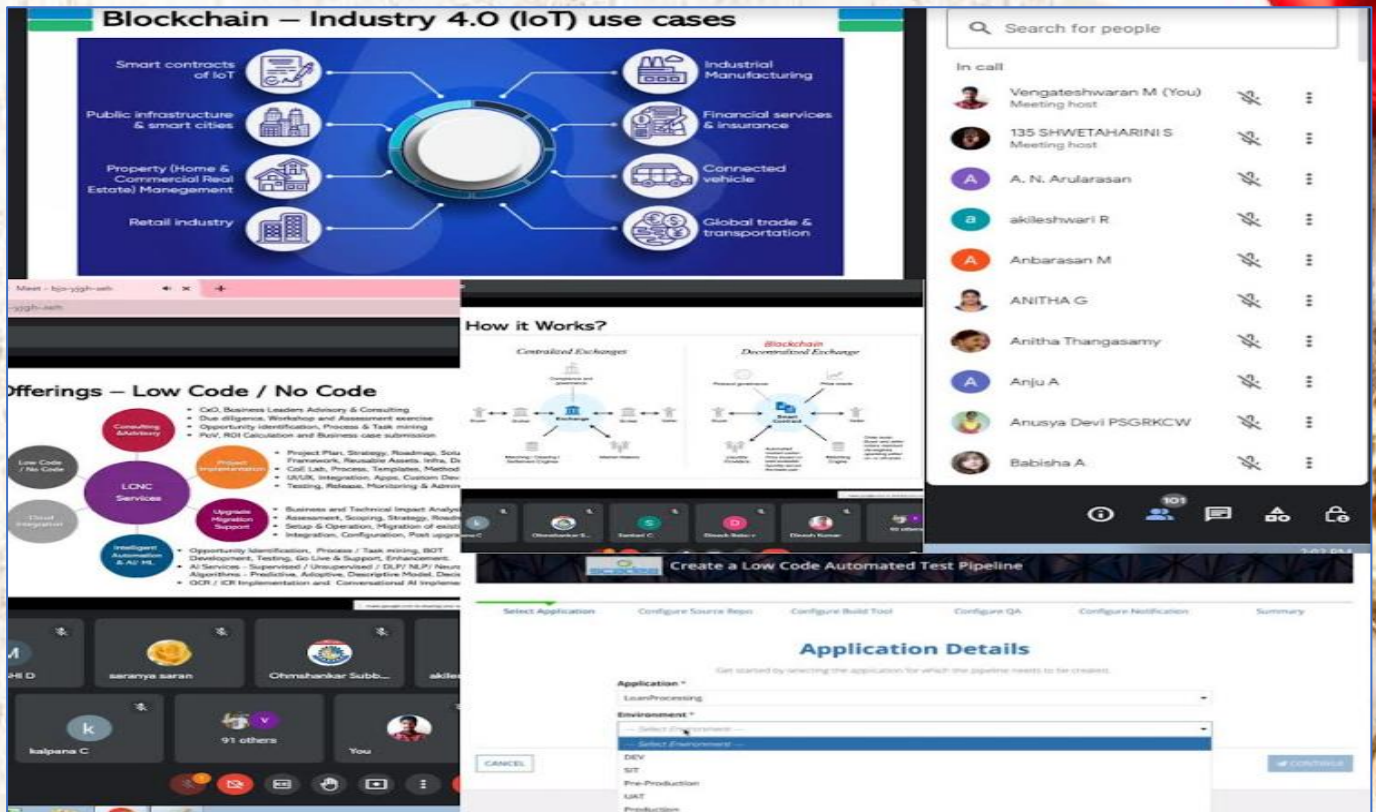
Resource Person: Dr.S.Sivasathya, HOD/CSE, Pondicherry University, Pondicherry.

Session Title: AI in Healthcare

Session Highlights:

- Overview on AI for healthcare
- Major players & significant of AI projects
- General Perception
- Research Key areas in AI
- How its works on Swarm Intelligence Algorithm
- Evolutionary Algorithm
- AI techniques used in COVID 19 Scenario
- Real time Applications

CSE | FDP ON RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES



Session 2:

Resource Person: Mr. Govindaraj Jawahar, CTO, Head of Engineering, Ideation works, London, UK.

Session Title: Block chain and Low & no code Techniques

Session Highlights:

- Introduction to Block chain Technology
- Industry 4.0 use cases
- How it's work on High level architecture
- Key challenges in manufacturing industry
- Honeywell Go Direct Trade portal
- Devsecops Platform
- Low code Test automation suite
- Real time pipeline monitor

CSE | FDP ON RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES

AI VS ML VS DATA ANALYTICS VS DATA SCIENCE

1950s - ARTIFICIAL INTELLIGENCE
Programs that can sense, reason, act and adapt

- First Neural Network
- Nearest Neighbour
- Bayesian methods
- Symbolic programming
- Rules-based system
- Genetic Algorithms
- Genetic Programming
- Intelligent Agents
- Reinforcement Learning

1980s - MACHINE LEARNING
Algorithms that learn patterns in data over time

- Backpropagation for Neural Networks
- Recurrent Neural Networks
- Random Forest
- Support Vector Machines
- XGBoost (2016)

2010s - DEEP LEARNING
Deep multilayered neural networks that learn from big data

- CNN, LSTM, RNN, GANs

Data Science blends data analytics, computer science and business domain expertise to solve business problems.

Data Analytics is the practice of using Machine Learning algorithms and visualization to derive insights.

Regression for sales forecasting

Year	Q1	Q2	Q3	Q4
2018	100	120	150	180
2019	120	140	170	200
2020	140	160	190	220
2021	160	180	210	240
2022	180	200	230	260

Can model thousands of features: Weather, demographics, geography, inventory levels, repeat purchases, pricing, etc. rather than a few

Active Learning

- attempts to address the learning from massive amount of unlabeled data
- by selecting a subset of most critical instances for labeling.
- aims to achieve high accuracy using as few labeled instances as possible
- thereby minimizing the cost of obtaining labeled data.

Labeling the model to select its own training data, will learn faster and hence perform better. Active learning models try to overcome the labeling bottleneck by asking for "queries". It is highly motivated to the ML problem where data is also sufficient, but labels are difficult or expensive to obtain.

BIG DATA ANALYTICS PLATFORM

Architecture diagram showing data sources (Data Lake, Data Warehouse, Data Hub) feeding into processing engines (MapReduce, Hadoop, Spark, Flink, Storm) and storage (Data Lake, Data Warehouse, Data Hub).

Session 1

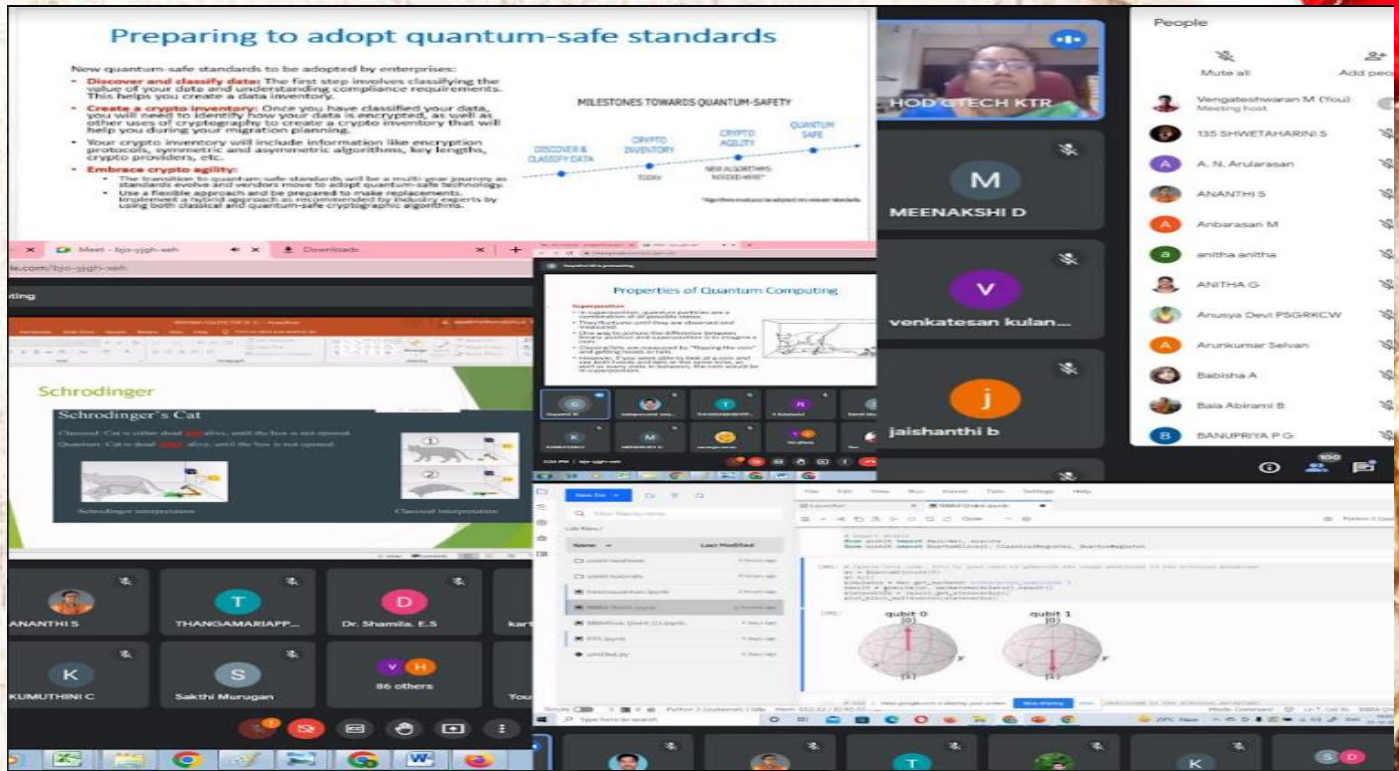
Resource Person: Dr.S.Chitrakala, Professor/CSE, Anna University (CEG), Guindy, Chennai.

Session Title: Unveiling the power of Advanced ML Techniques for Big Data Processing

Session Highlights:

- Introduction to big data analytics & ML
- ML challenges originating from big data
- Active Learning
- Fedrated Learning
- How its works on ML Techniques for Big Data Processing
- ML with Big Data application use cases

CSE | FDP ON RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES



Session 2:

Resource Person: Dr.M.Pushpalatha, HOD/CSE, SRM University Kattankulathur, Chennai.

Session Title: Quantum Cryptography

Session Highlights:

- Introduction to quantum computing
- How quantum computers work faster
- Potential use cases of quantum
- How will quantum computing impact on cryptography
- Address the future quantum threats
- Shor's Algorithm & Qubits
- Hands-on IBM Quantum Tool
- Real time application with use cases

MCT | 2020 CURRICULUM DISCUSSION



The Curriculum Development Cell of **Department of Mechatronics Engineering** Conducted a brainstorming sessions for formulating the second-year courses of R2022. All the faculty members participated actively in the

MCT | HOD INTERACTION



Dr.M.Lydia, HoD, **MCT**, welcomed and addressed **Third year MCT** students on the First day of the even semester.

- Importance of placement drive and attendance
- Student Discipline (wearing of ID card, Formal dress code, clean shave)
- Punctuality during class hours
- OD form submission procedure
- Mini Project Execution
- General grievances
- Excellence in Academics

EEE | BOS MEETING



16th Board of Studies Meeting was organized by the **Department of Electrical and Electronics Engineering** for the approval of R2022 - III & IV Semester Syllabus and R2020 – Professional Core Electives on 20.12.2022 in EEE Conference Hall. The meeting was convened by **Dr.K.C.Ramya**, Professor and Head, Department of EEE. **Dr.B.Karunamoorthy**, Associate Professor, Department of EEE, Kumaraguru College of Technology, Coimbatore was the Anna University nominee. The Academic Experts **Dr.K.Udhayakumar**, Professor, Department of EEE, Anna University, Chennai, and **Dr.S.Moorthi**, Associate Professor, Department of EEE, National Institute of Technology, Tiruchirappalli, Industry Experts **Mr.G.Arun Prakash**, Electricals and Project Engineer, Bradken, Coimbatore and Alumni **Mr.D.Pradeep Kumar**, Project Lead, Philips Healthcare, Bengaluru were the members of the meeting. The board members shared their valuable suggestions. The senior faculty members of EEE Department were also present during the meeting.

EEE | GUEST LECTURE ON BE A PART OF THE SOLUTION, NOT A PART OF THE POLLUTION



NSS unit of SKCET in association with the Department of **Electrical and Electronics Engineering** organized a Guest Lecture on '**Be a Part of the Solution, Not a Part of the Pollution**'.

Resource Person:

Mr.K.Kalidasan, President, OSAI Environmental Organisation, Coimbatore.

Session Focus:

- # Industrial Pollution & Environmental Degradation,
- # Prevention and Control of Pollution,
- # Pollution impact on Wildlife and Vegetation,
- # Harmful effects and Waste management of Plastics,
- # Government Initiatives and measures to mitigate Pollution.

EEE | E-KART CLUB ACTIVITY



E-Kart Club of EEE Department provided an outlet for the students to explore their interests and passion for designing the E-vehicles. The club has been positioned to adapt the talents and sharpen student's skills by signing up for various competitions. To evaluate and review the designs, the Club hosted an **expert conference** with the fraternity of Pulsed Batteries and Go-Kart Mentors, to enhance the product.

Industry Mentors:

1. Mr. Bharath Kumar, Electrical Evaluator - Battery and Power Train, Coimbatore.
2. Mr. Shivrane Gowrisankar, Pinnacle Lithium Power, Coimbatore.

Key Assessments:

- # Analysis of the Chassis using ANSYS and Solid works,
- # Selection of Motor capacity and its relevant battery,
- # Reconfiguration of Steering position for the driver safety,
- # CAN based Dash board controller for efficient tracking of vehicle parameters,
- # Selection of the efficient BMS with respect to climatic conditions.

EEE | NATIONAL ENERGY CONSERVATION DAY



Department of **Electrical and Electronics Engineering** organised a Webinar on '**Energy Conservation and Management**' to commemorate National Energy Conservation Day on 14.12.2022 for EEE Students.

Resource Person:

Mr.Dominic, Energy Auditor, Eilmeh Engineers, Coimbatore.

Session Focus:

- # Virtuous Cycle of Organizational Energy Efficiency,
- # Energy Efficient Economy,
- # Resource Investment,
- # Executive Management.

EEE | NATIONAL ENERGY CONSERVATION WEEK 2022



As part of the Energy Conservation Week celebrations, the Energy Audit Cell of **EEE** Department organized a Energy Debate on the topic '**Race2Decarbonisation**' for EEE Students on 19.12.2022. Third year Students enthusiastically participated in the event.

External Jury: Er. P. Premkumar, Technical Training Lead, Petroleum Conservation Research Association (PCRA), Coimbatore.

Crest Pointers:

- Is there a global effort to reach net zero?
- How do we transform the commitments into concrete measures?
- Net zero carbon pledges have good intentions but they are not enough.
- Sustainable aviation fuel could bring Indian industry to net-zero.

EEE | NATIONAL ENERGY CONSERVATION WEEK 2022



As part of the Energy Conservation Week celebrations, the Energy Audit Cell of EEE Department conducted Poster Presentation on the topic 'Entailing Energy Conservation' for EEE students on 21.12.2022. The students enthusiastically participated and presented on their posters.

External Jury: Er. P.Shreeram, Director - MM Future Energy, Coimbatore.

Gists of posters:

- ✓ Green Energy clean Energy
- ✓ Think Act and Save
- ✓ Zero emission gadgets.

The external jury appreciated the participants for their great contribution and efforts in designing the posters.

EEE | HOD INTERACTION



Kuniyamuthur, Tamil Nadu, India

sri krishna college of engineering and technology Class Room Block 1,
BK Pudur, Sugunapuram East, Kuniyamuthur, Tamil Nadu 641008, India

Lat 10.93725°

Long 76.956126°

19/12/22 09:22 AM GMT +05:30



Kuniyamuthur, Tamil Nadu, India

102A, BK Pudur, Sugunapuram East, Kuniyamuthur, Tamil
Nadu 641008, India

Lat 10.936596°

Dr.K.C.Ramya, HoD, **EEE** welcomed the **Pre - final** year students for the academic year 2022-23 Even Semester. The key points addressed were.

- Class Attendance and Discipline
- Career Guidance and Placement Opportunities
- Importance of Bootcamp, T1 &T2 Training Classes
- Resume preparation
- Internship

EEE | TECHNICAL TALK

Energy Star Ratings

Refrigerators

Star	NIL	5 star	2 star
Volume	190 liters	190 liters	150 liters
Energy p.a.	700 units	203 units	480 units
% savings	0	71%	31%
Life	12 years	12 years	12 years
Lifetime Energy	8,400	2,436	5,760
Energy Cost	90,400	14,636	34,560

LCCA = Life Cycle Cost Analysis

14 kg LPG

LPG charges : Rs. 790
Subsidy : Rs. 309
Net Amount : Rs. 485

400 kWh Electricity

Current charges : Rs. 2,005
Subsidy : Rs. 125
Net Amount : Rs. 1,880

65% savings in electrical energy

Runs 3 times longer on inverter
3 Year warranty
Remote Control with Sleep and Timer Mode
Less Noise and Heating

Energy : +5200 kWh
Power : +90 watts
Air delivery : +228 m³/min
Speed : +520 rpm
Price : +Rs. 2000 - 4000 (online)
Power Factor : +0.95

Department of **Electrical and Electronics Engineering** conducted a Technical Talk on “**Energy Management Techniques**” for the Third year EEE students on 21.12.2022.

Resource Person: Dr. Mohammed Ehsan, Deputy Manager, Bharath Heavy Electricals Limited (BHEL), Trichy.

Session Keys:

- Need for Energy Management.
- Utilisation of BLDC Machines for Industrial applications.
- Cost reduction techniques.
- Impact of EVs on Zero Carbon.

IT | BOS MEETING



The Department of **Information Technology** conducted **Board of Studies Meeting** on 21.12.2022. The meeting was convened by **Dr. N. Susila**, HoD IT. The main agenda of the meeting was to approve syllabi of seventh semester courses, elective courses of Regulation 2020 of B.Tech IT, fifth-semester courses, open elective courses, professional elective courses of Regulation 2020 (2021-2025 Batch) and third-semester courses of Regulation 2022.

BoS Members:

University Nominee: Dr. J. Raja Sekar, Professor & Head, Department of CSE, Mepco Schlenk Engineering College, Sivakasi

Academic Experts: Dr. N. Jaisankar, Professor, School of Computing Science and Engineering, V.I.T University, Vellore

Dr. M. Sangeetha, Associate Professor, Department of IT, Coimbatore Institute of Technology, Coimbatore

Industry Expert: Mr. RamKumar Kuppuchamy, Associate Director - Cloud Migration, Presidio, Coimbatore

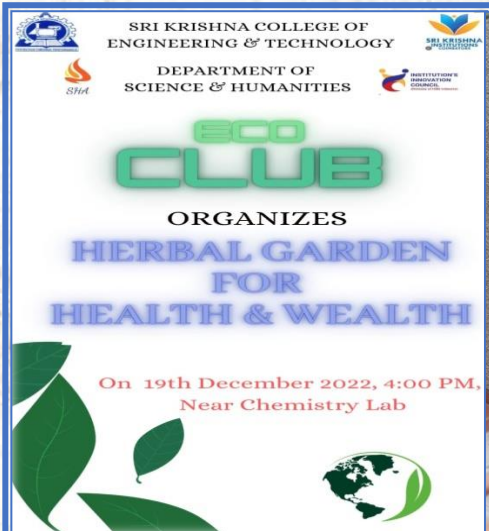
Alumni Expert: Mr. K. Faizal, Senior Manager - Projects, Cognizant Technology Solutions, Coimbatore.

S&H | INTERACTION WITH HOSTEL STUDENTS



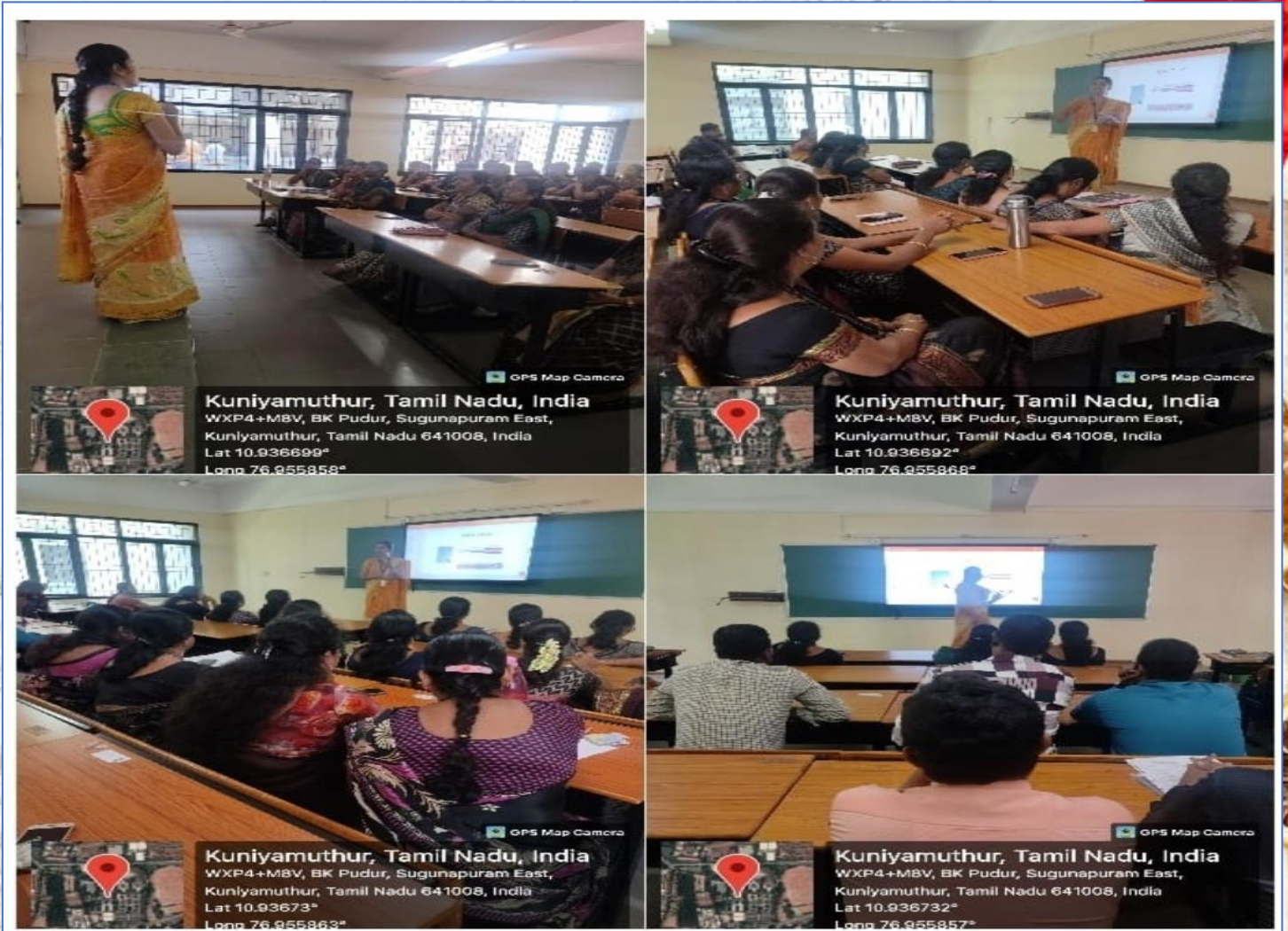
Dr.V.Ragavi, Dean of Student Affairs, addressed the **First** year Hostel students for an effective functioning of the hostel. Behavior and discipline, adherence to hostel timings, and cleanliness of the rooms were the key pointers of discussion.

S&H | EXTENDED HOUR ACTIVITY ECO CLUB



ECO Club of SHA conducted an event, **Herbal Garden for Health and Wealth** for the First year BE, B.Tech & M.Tech CSE students to impart the growing consciousness of the need to conserve medicinal plants and herbs.

S&H | FACULTY EXTRAMURAL SESSION



Department of Science and Humanities conducted Extramural Session for faculty members to develop and exhibit their potential fully and achieve excellence.

Ms.Kalaivani K, Assistant Professor, S&H presented a lecture on Fiber Optics Communication and its application.

S&H | EXTENDED HOUR ACTIVITY



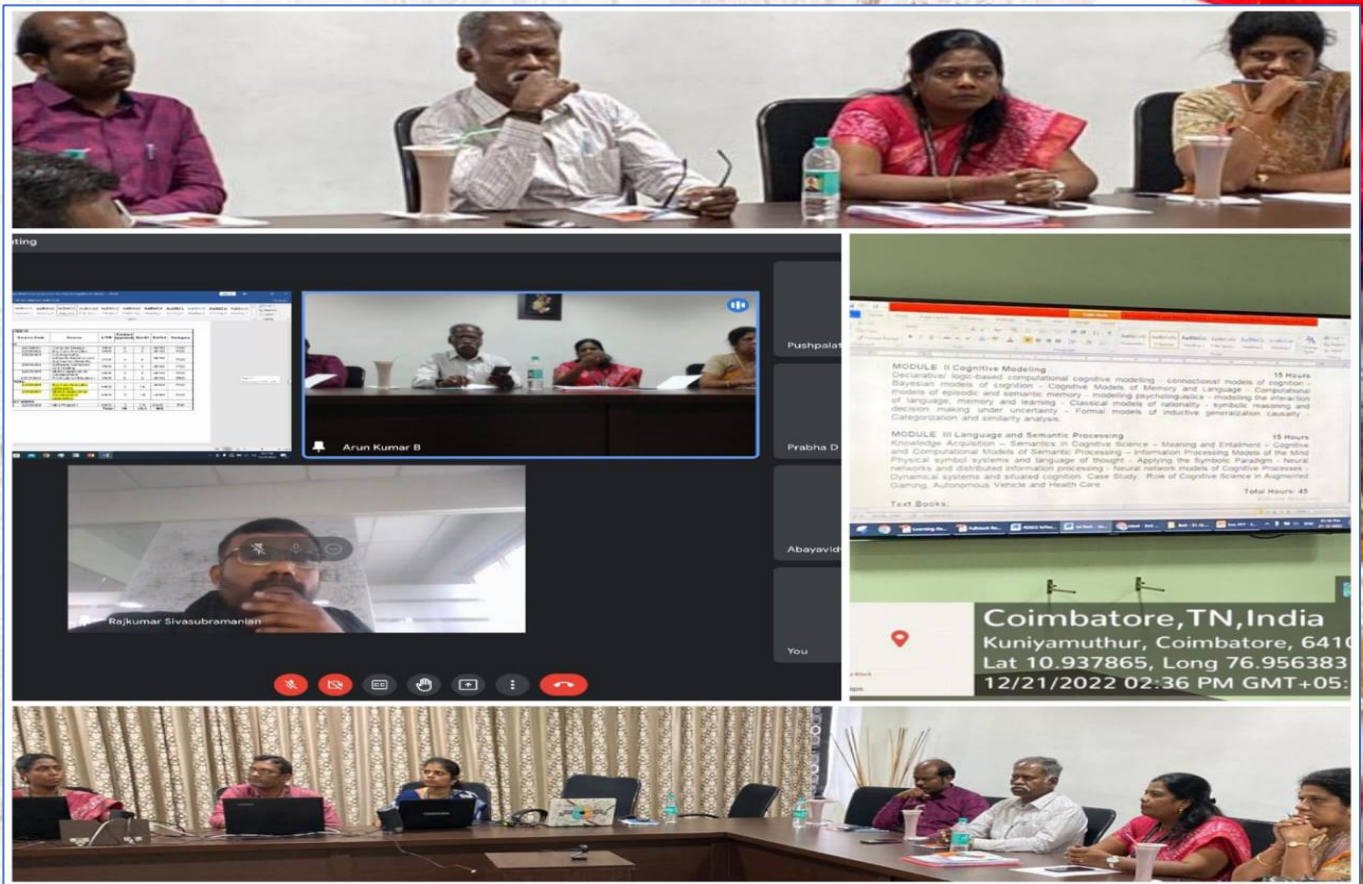
Creative Club of **SHA** conducted an event, **Design your Invite - Designing a Digital Invitation** for the **First year BE, B.Tech & M.Tech CSE** students to create an environment that continually fosters creativity and innovation. Students have participated and exhibited their creativity using digital tools.

S&H | EXTENDED HOUR ACTIVITY



Theatre Club of SHA conducted **Literary Melodica - Singing of Animated Movie Songs** for the **First** year students to recognize the young artistic talents that delight the senses through their performances.

M.Tech. CSE | BOS MEETING



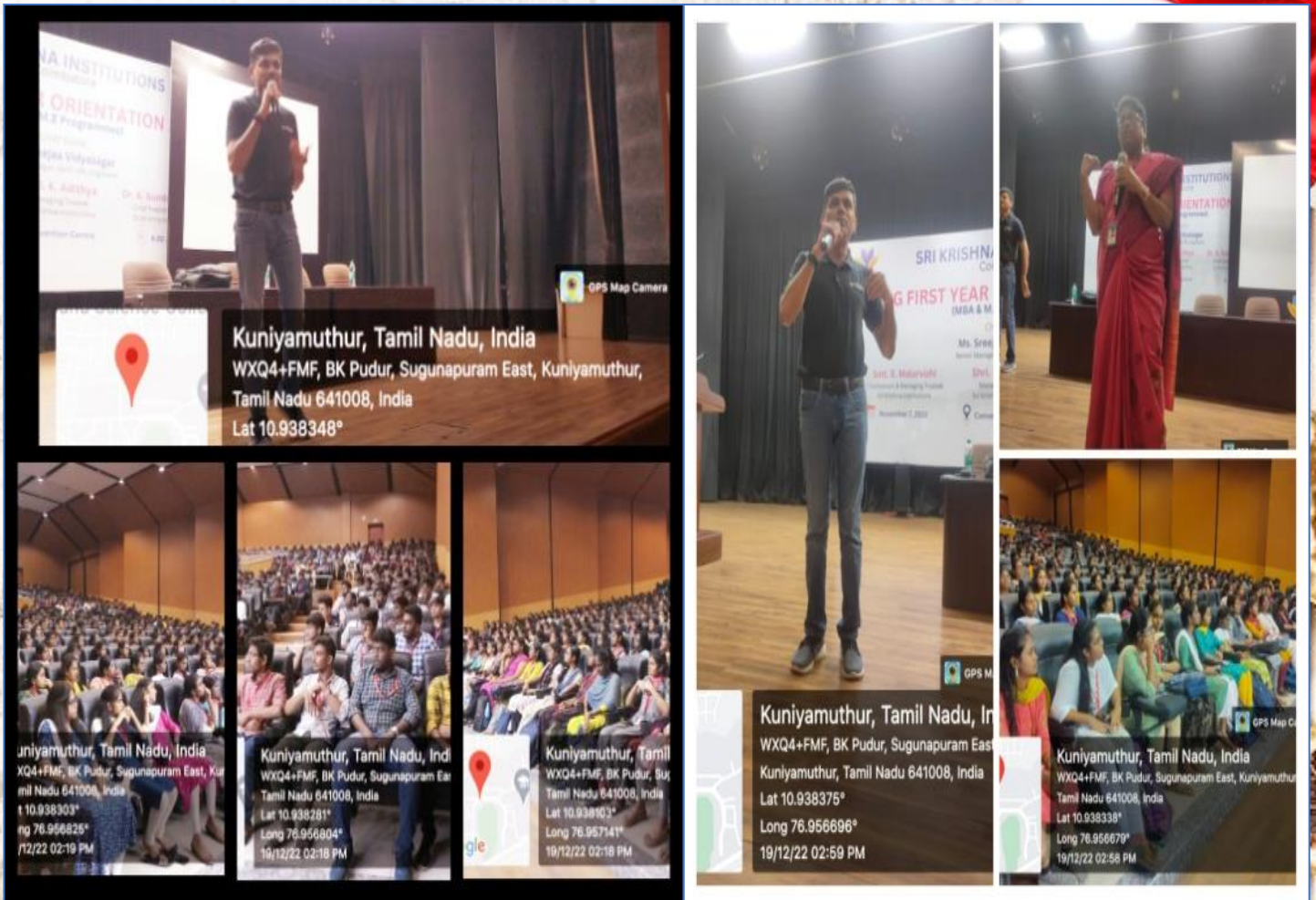
Department of **M.Tech. Computer Science and Engineering (5 Yr Integrated)** has conducted **7th BoS Meeting** on 22.12.2022. **Dr.P.Kavitha Rani**, Professor & Head, **M.Tech.CSE** convened the meeting and discussed about the approval of 9th & 10th Semester Core & Thriving Elective Courses. **Dr. J. Raja Sekar**, Professor-CSE, MepcoSchlenk Engineering College, Sivakasi, **Dr.N.Radhika**, Professor, School of Computing, Amrita VishwaVidyapeetham, Coimbatore, **Dr.P.M.Durai Raj Vincent**, Associate Professor Grade 2, School of Information Technology and Engineering, Vellore Institute of Technology, **Mr.S.Rajkumar**, Associate Director, Virtusa and **Ms.R.Abayavidya**, Function Head and Group Manager, Infosys Limited, Bangalore were the external experts and they approved the syllabi.

M.Tech. CSE | SOFTSKILL TRAINING



Third year students of **M.Tech Computer Science and Engineering** has underwent **TCS Soft Skills Training** on **21st** and **22nd** November 2022. Resource person for the session was **Mr.Magesh BJ**, Academic Relationship Manager, TCS, Bangalore. The Key points discussed were: Career Path Growth ,SMART - Goal Setting ,SWOT Analysis ,Corporate expectations from Freshers , Business 4.0, SLA & KPI ,Body Language ,Barriers to Effective Communication and Presentation skills.

S&H | INDUSTRY TRAINING ORIENTATION



SKCET organized **Industry Training Orientation** programme for the **First year CSE, IT, AI&DS, CSD, Cyber Security, ECE and EEE** students on 18th December, 2022 at Convention Centre. The session was lead by **Mr.Senthil**, Co-Founder, lamneo and **Dr.Jayasudha Subburaj**, Placement Officer.

S&H | NATIONAL MATHEMATICS DAY

SRI KRISHNA COLLEGE OF ENGINEERING & TECHNOLOGY
An Autonomous Institution, Affiliated to Anna University - Chennai
Accredited by NAAC with "A" Grade, Accredited by NBA
(CSE, ECE, IT, MECH, MCT, EEE & CIVIL)
Coimbatore

Department Of Science & Humanities

Invites you to join the
NATIONAL MATHEMATICS DAY 2022

Chief Guest
Dr. R. Prabakaran
Assistant Professor
Coimbatore Institute of Technology
Coimbatore.

Presided by
Dr. J. Janet
Principal, SKCET

Felicitation by
Dr. V. Ragavi
Dean-Student Affairs,
SKCET

Organizer
Dr. A. Indhuleka
Head of the Department,
Department of Science and Humanities
SKCET

Programme Co-Ordinator
Dr. A. Shobana
Professor,
Department of Science and Humanities
SKCET

22-12-2022

MCA SEMINAR HALL

10:30 AM - 12:00 PM

SRI KRISHNA COLLEGE OF ENGINEERING & TECHNOLOGY
An Autonomous Institution, Affiliated to Anna University - Chennai
Accredited by NAAC with "A" Grade, Accredited by NBA
(CSE, ECE, IT, MECH, MCT, EEE & CIVIL)
Coimbatore

Department Of Science & Humanities

Invites you to join the
NATIONAL MATHEMATICS DAY 2022

Chief Guest
Dr. R. Prabakaran
Assistant Professor
Coimbatore Institute of Technology
Coimbatore.

Presided by
Dr. J. Janet
Principal, SKCET

Felicitation by
Dr. V. Ragavi
Dean-Student Affairs,
SKCET

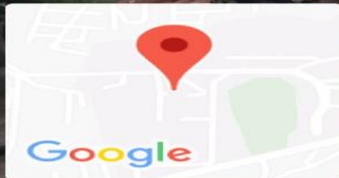
Organizer
Dr. A. Indhuleka
Head of the Department,
Department of Science and Humanities
SKCET

Programme Co-Ordinator
Dr. A. Shobana
Professor,
Department of Science and Humanities
SKCET

22-12-2022

MCA SEMINAR HALL

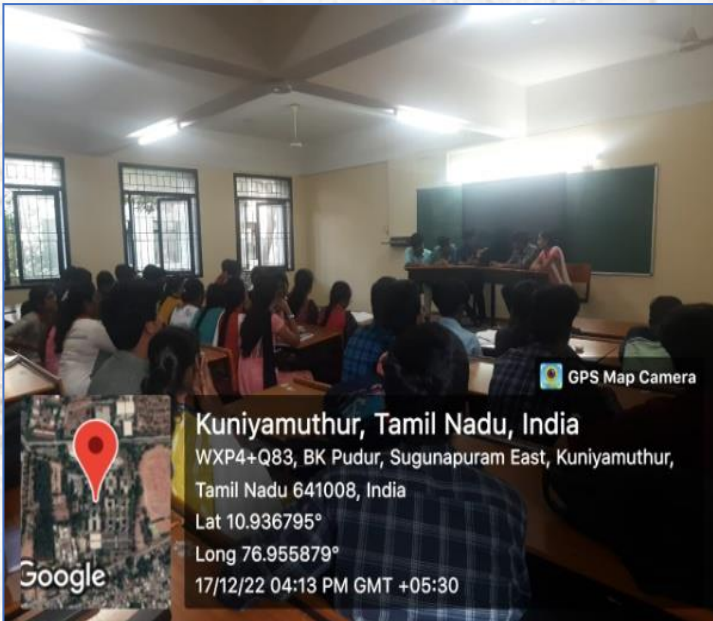
10:30 AM - 12:00 PM



Kuniyamuthur, Tamil Nadu, India
WXQ4+3GW, BK Pudur, Sugunapuram East, Kuniyamuthur,
Tamil Nadu 641008, India
Lat 10.937611°
Long 76.956266°
22/12/22 11:13 AM

Department of Science and Humanities organized a Guest Lecture on “Application of Engineering Mathematics in Real life” to commemorate the birthday of the great Indian Mathematician, **Srinivasa Ramanujan**. **Dr.R.Prabakaran**, Assistant Professor, Department of Mathematics, Coimbatore Institute of Technology was the Resource Person. As a part of celebration, a Quiz Competition was conducted for the First year students to bring a path in the mind a way of habit of reasoning or thinking. The prize winners were rewarded with shield.

S&H|STUDENT EXTRAMURAL



Kuniyamuthur, Tamil Nadu, India
WXP4+Q83, BK Pudur, Sugunapuram East, Kuniyamuthur,
Tamil Nadu 641008, India
Lat 10.936795°
Long 76.955879°
17/12/22 04:13 PM GMT +05:30



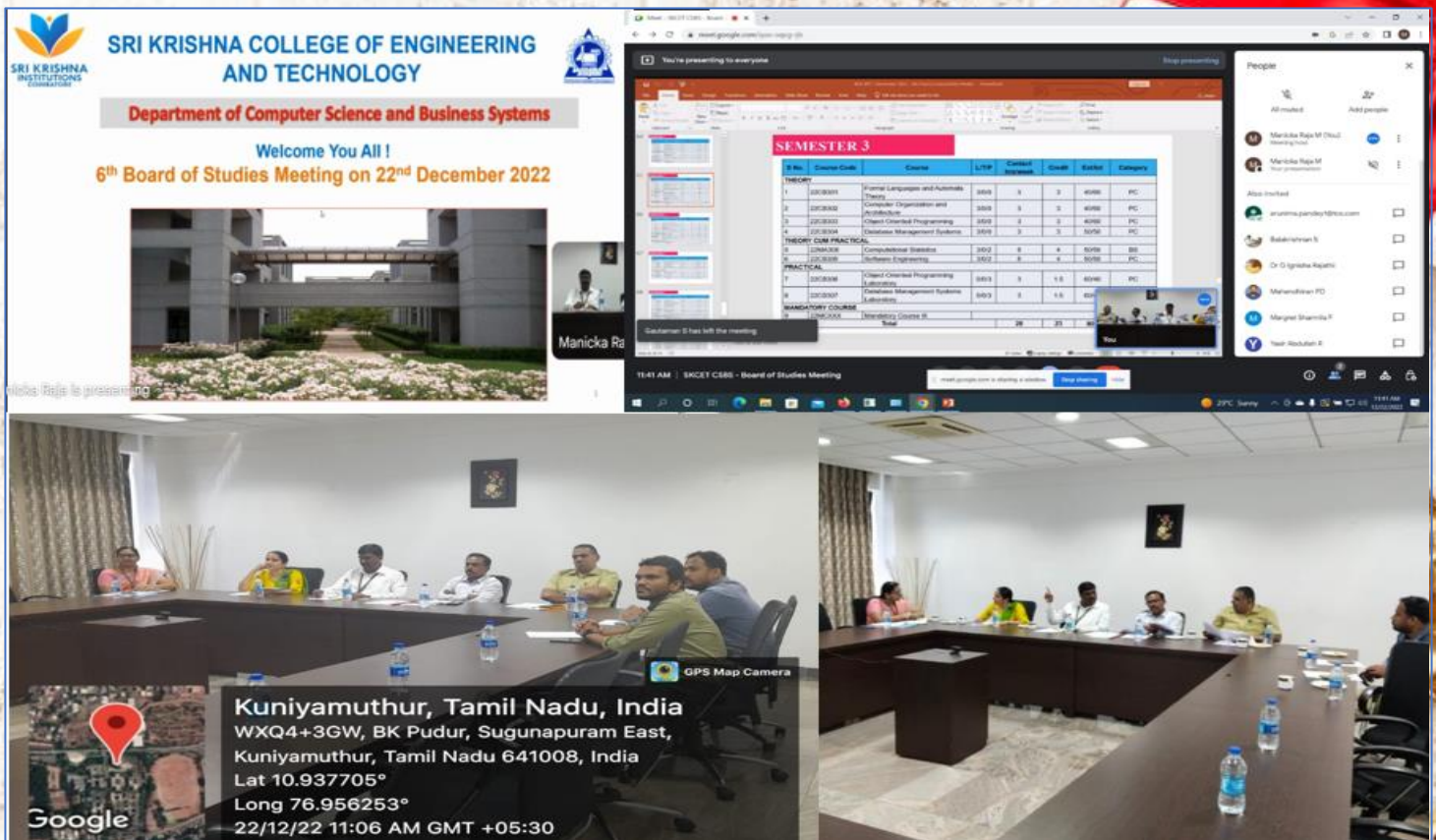
Kuniyamuthur, Tamil Nadu, India
WXP4+Q83, BK Pudur, Sugunapuram East, Kuniyamuthur,
Tamil Nadu 641008, India
Lat 10.936841°
Long 76.955889°
17/12/22 04:08 PM GMT +05:30



Kuniyamuthur, Tamil Nadu, India
WXP4+Q83, BK Pudur, Sugunapuram East, Kuniyamuthur,
Tamil Nadu 641008, India
Lat 10.936833°
Long 76.955888°
17/12/22 04:09 PM GMT +05:30

Extramural Club of SHA organized **Group Discussion** on the topic **Social Issues: In 21st Century** for the **First** year students to generate creative thinking and to develop their skills in interpersonal communication and in expressing their views in a clear and succinct manner.

CSBS | BOARD OF STUDIES MEETING



6th Board of Studies Meeting for the Department of **Computer Science and Business Systems** was convened on 22.12.2022 by Dr. S. Balakrishnan, Professor and Head of CSBS. The meeting included presentations on curriculum changes, credit distribution in the 2022 Regulation. External expert members included **Dr.B.Thanasekhar**, Associate Professor, Department of Computer Technology, MIT, Chennai, **Dr.L.Ramanathan**, Associate Professor, School of Computer Science and Engineering, Vellore Institute of Technology, Vellore, **Dr.N.M.Dhanya**, Assistant Professor, Department of Computer Science and Engineering, Amritha Vishwa Vidyapeetham, Coimbatore, **Ms.Arunima Pandey**, Manager, Tata Consultancy Services, Pune, and **Mr.Gautaman Sarangan**, Senior Software Engineer, TCS, Australia shared their significant expertise, provided useful suggestions, and approved the courses.

AI&DS | BOS MEETING



The Department of **Artificial Intelligence and Data Science** conducted 5th BoS Meeting for the approval of Regulation 2020 7th semester, Professional Elective Courses V & VI, Open Elective Courses and for Regulation 2022, 3rd semester courses on 21.12.2022 @ 3:30 PM in Conference Room, Admin Block.

University Nominee:

Dr. J. Raja Sekar,
Professor, CSE,
Mepco Schlenk Engineering College, Sivakasi,

Academic Experts:

Dr.M.Premalatha, Associate Professor, CSE VIT - Chennai

Dr.R.AnnieUthra,

Professor & Head, Computational Intelligence, SRM Institute of Science and Technology, Chennai

Industry Expert:

Mr.Boobalan, Assistant Vice President, Payoda, Chennai.

AI&DS | INDUSTRY ORIENTATION SESSION FOR FIRST YEAR



Dr.S.Venkata Lakshmi, HOD, AI & DS delivered Industry Orientation Session for the First year students on 19.12.2022

Session Takeaways:

- Importance of Industry class
- Understand the concept of each topic with real world connect
- Daily Practice
- Placement record
- Outside College participation

AI&DS | GUEST LECTURE ON ANT COLONY OPTIMIZATION IN 5G NETWORK



The Department of **Artificial Intelligence & Data Science** organized a Guest Lecture on "**Ant Colony Optimization in 5G Network**" for **Third year AI & DS Students**.

Date: 21.12.2022

Time: 2:00 pm to 3:00 pm.

Resource Person: **Dr. M. PREMALATHA, Associate Professor, CSE, Vellore Institute of Technology, Chennai.**

Session take-aways:

- Optimization problem
- Ant Systems
- Ant Colony Optimization
- Mathematical Model of ACO
- Implementation of ACO
- Tools/ Packages for ACO

CSE | FDP ON RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES

Bagging Ensemble Algorithm

$$F_{bag} = \hat{f}_1(X) + \hat{f}_2(X) + \dots + \hat{f}_T(X)$$

Step 1- Generate T bags from training data by sampling with replacement.

Step 2- Generate the base learner & train on their bag.

Step 3- Final prediction is either average for regression and max vote for classification

Model Training

iii. K-fold Cross-validation method:

- 10-fold Cross-Validation
- Leave-One-Out Cross-Validation

Training Patterns	Test Patterns
P11—P10	P91—P100
P11—P20	P81—P90
P21—P30	P71—P80
P31—P40	P61—P70
P41—P50	P51—P60
P51—P60	P41—P50
P61—P70	P31—P40
P71—P80	P21—P30
P81—P90	P11—P20
P91—P100	P1—P10

Random Forest (RF)

Session 1:

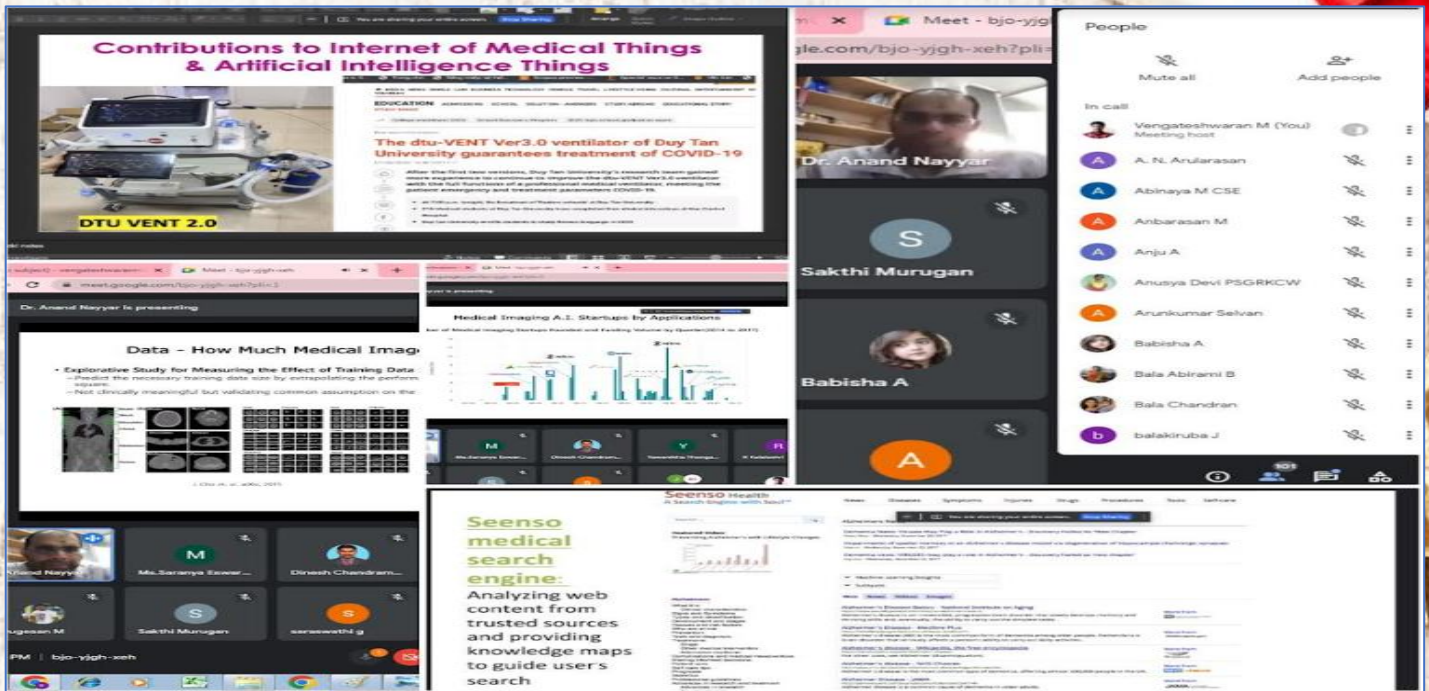
Resource Person: Dr.Saroj Kumar Biswas, HOD/CSE National Institute of Technology (NIT), Silchar, Assam.

Session Title: Ensemble Learning

Session Highlights:

- Introduction to Ensemble Learning
- ML Model Training & Evaluation
- K-fold cross validation method
- Bootstrap sampling & strapping
- Performance measures for classification model
- Bagging Ensemble algorithm & techniques
- Random Forest algorithms
- Real time use cases with examples

CSE | FDP ON RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES



Day4:

Resource Person: Dr.Anand Nayyar, Vice-Chairman (Research), Director School of Computer Science , Duy Tan University, Da Nang, Vietnam.

Session Title: Medical Image Processing

Session Highlights:

- Introduction to Medical image processing
- Classification problem: identifying different types of disease
- Patent Identification in face recognition
- Genomics for treatment design
- Beyond diagnostics: ML on medical images for clinical research
- Key features of cogilex semantic search technology
- Amazon comprehend medical
- Real time use cases with Brain inspired Learning

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skcetbuzz@skcet.ac.in

R&D | PAPER PUBLICATION | ECE

YMER | ISSN: 0044-0477 <http://ymerdigital.com>

DESIGN OF PROSTHETIC HAND TO IMPROVE THE LIFESTYLE OF PEDIATRIC PARTIAL HAND PATIENTS

Albert Raj.A¹, Ragavendra N², Rakesh P³, Rakesh R⁴, Raaghul S⁵

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ABSTRACT

In modern medicine, Prosthetic Hand plays an important role in helping the people who lost his/her hand due to some incident or accident. It also helps people who is unable to use his/her hand due to stroke. So, Prosthetic Hand helps our various people across the world. So with this thought in mind, we wanted to create an awareness among the students about the prosthetic hand hence we made this project. In this project we made a small working prototype of prosthetic hand using 3d printer. The prosthetic hand works due to the Arduino board which contains the VHDL code for working of the arm. Arm is powered by servo motors which controls the actuators and reflectors. In Modern Technology, the scope of Prosthetic Hand have improved a lot over the time. Artificial Intelligence plays a major role here in Prosthetic Hand. Technology has grown a lot in this field that when the user wears the prosthetic hand and can think of the work to be done by the hand and the hand will do the work.

Dr.A.Albert Raj, Professor, Department of ECE has published a Scopus indexed Journal paper titled **“Design of Prosthetic Hand to Improve the Lifestyle of Pediatric Partial Hand Patients”** in YMER Journal, ISSN: 0044-0477, volume 21, issue 11, pp. 1372-1377.

R&D | PAPER PUBLICATION | ECE

Mr.S.P. Karthi, Assistant Professor, Department of ECE has published a Scopus indexed Journal paper titled **“Design of Prosthetic Hand to Improve the Lifestyle of Pediatric Partial Hand Patients”** in YMER Journal, ISSN: 0044-0477, volume 21, issue 11, pp. 1366-1371.

YMER | ISSN: 0044-0477 <http://ymerdigital.com>

SMART HUMAN BODY MONITORING SYSTEM USING ARDUINO

Karthi. SP¹, Nandha Kumar D², Kavin Prasath K³, Manishkumar V⁴, Nishikanth S⁵

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ABSTRACT

The healthcare monitoring system is one of the most important systems from the last decade. It is emerged as technology oriented system. Due to lack of timely medical care to the individuals who are suffering from various diseases and they become ill and it leads to unexpected death of the patients. All people in this COVID condition are very concerned about maintaining their health. Our initiative is set up to provide essential medical care without a doctor's assistance. IoT is quickly transforming the healthcare sector thanks to a proliferation of new healthcare technology start-ups. We created the Human Body Monitoring System for this project. GSM is the communication tool utilized in this project. Both the surrounding temperature and the heart rate could be read by this instrument. It continuously measures the ambient temperature and pulse rate and sends SMS updates. The project's many features are implemented by the Arduino Sketch running on the device. These include reading sensor data, stringifying them, feeding them to the device, and displaying measured pulse rate and temperature on a character LCD.

R&D | PAPER PUBLICATION | ECE

Research Article

Brain Computer Interface Based Thought Recognition System Using a Hybrid Deep Learning Model

Janeera D.A. & S. Sasipriya

Published online: 26 Dec 2022

Download citation | <https://doi.org/10.1080/03772063.2022.2150695> | Check for updates

Full Article | Figures & data | References | Citations | Metrics | Reprints & Permissions | Get access

Abstract

Brain-Computer Interface (BCI) connects the human brain with computers and electronic devices. The signals from human brain are processed using several deep-learning techniques to convert them into a comprehensible form. Among these techniques, the convolutional neural network (CNN) model has excellent performance in BCI recognition. However, the existing CNN model is prone to over-fitting and has limitations with accuracy. The model complexity must be increased to achieve better accuracy. To address these concerns, a novel hybrid R-CNN model for BCI thought recognition is proposed in this work. The convolution layer of CNN and the Long short-term memory (LSTM) layer of recurrent neural network (RNN) is utilized for this purpose. A batch normalization layer is also instigated to reduce over-fitting. Further, a rectified linear unit (ReLU) is engaged to speed up training under as low as five epochs, along with a custom optimizer which optimizes some default values within the optimizer. Experiments are performed with BCI datasets of two different file sizes with different records. The first dataset size is 6.5 MB having 60684 records with three classes, and the second dataset size is 10.1 MB having 94119 records with five classes. Consequently, the proposed hybrid model exhibits a higher average accuracy of 95% for 6.5 MB file size and 98% for 10.1 MB file size, which is superior compared to the accuracy of existing deep learning models. Furthermore, the efficiency of the proposed novel hybrid R-CNN model is evaluated with some other performance measures.

Related research

Recommended articles | Cited by

A covert attention F300-based brain-computer interface: Geopell >

Fabio Aloise et al. Ergonomics Published online: 26 Apr 2012

Mental workload during brain-computer interface training >

Elizabeth A. Felson et al. Ergonomics Published online: 26 Apr 2012

F300 Detection with Brain-Computer Interface Application Using PCA and Ensemble of Weighted SVMs >

Sourav Kundu et al.

Dr.S.Sasipriya, Professor and Head, Department of **ECE** has published an Anna University Annexure I, SCIE and Scopus indexed Journal paper titled **“Brain Computer Interface Based Thought Recognition System Using a Hybrid Deep Learning Model”** in IETE Journal of Research, ISSN: 03772063, DOI: 10.1080/03772063.2022.2150695.

R&D | PAPER PUBLICATION | MECH

Dr.A. Rajesh, Assistant Professor, **Mechanical Engineering** published a scientific research article entitled **‘Mechanical Behavior of Inflorescence / Glass Fiber Reinforced Hybrid, Epoxy Composites’** in Materials Technology International Journal. It is a WoS and Scopus Indexed Journal with Impact Factor 0.663. The journal is also listed in Anna University Annexure 1.

UDK 620.168.3
Original scientific article/Izvirni znanstveni članek

ISSN 1580-2949
MTAE9, 56(6)637(2022)

MECHANICAL BEHAVIOUR OF INFLORESCENCE/GLASS-FIBRE-REINFORCED HYBRID EPOXY COMPOSITES

MEHANSKO OBNAŠANJE HIBRIDNEGA EPOKSI KOMPOZITA OJAČANEGA S KOMBINACIJO NARAVNIH IN STEKLENIH VLAKEN

Athithanambi Anna Anban^{1*}, Manomani Krishnaswamy², Rajesh Appasamy³

¹Nehru Institute of Engineering and Technology, Coimbatore, Tamil Nadu
²Government College of Engineering, Tirunelveli, Tamil Nadu
³Sri Krishna College of Engineering and Technology, Coimbatore, Tamil Nadu

Prejem rokopisa – received: 2022-08-03; sprejem za objavo – accepted for publication: 2022-10-07

doi:10.17722/mit.2022.588

The biodegradability and environmental friendliness of natural fibres makes them suitable for implementation in a circular economy. As a result, several natural fibres and processing methods have evolved. The hydrophilic nature of ligno cellulose fibrils restricts the effective adhesion at the interface of fibre and matrix. The hybridization of natural fibres with synthetic fibres leads to promising characteristics of the resulting composite materials. This paper deals with the hybridization of conventional glass fibre and natural fibre extracted from coconut inflorescence. The effect of hybridization on the tensile and flexural strengths of surface-modified inflorescence fibre with glass fibres was investigated. The composites were fabricated using a hand-lay-up technique by varying the inflorescence fibre and glass-fibre reinforcement composition by (5, 10, 15 and 20) %. A notable improvement in the tensile and flexural strengths of 193.65 MPa and 240.69 MPa was observed for 85 % of glass and 15 % of benzoyl-chloride-modified inflorescence-fibre-reinforced hybrid composites. The elimination of amorphous constituents in the inflorescence fibres was checked by XRD and FTIR analyses. A surface-morphology analysis of unmodified and benzoyl-chloride-modified inflorescence fibres revealed pores and cavity formation on the fibril walls. These composites with superior mechanical properties can be an alternative to synthetic fibre composites and ensure the implementation of a circular economy and sustainable manufacturing.

Keywords: inflorescence fibres, hybridization, X-ray diffraction, Fourier-transform infrared, scanning electron microscope

R&D | PAPER PUBLICATION | MECH

Dr. S. Karthik, Assistant Professor, Mechanical Engineering published a scientific research article entitled 'Unravelling the Tribological Behavior of Mercerized Coconut Fiber Fortified Unsaturated Polyester Composites' in Materials Technology International Journal. It is a WoS and Scopus Indexed Journal with Impact Factor 0.663. The journal is also listed in Anna University Annexure 1.

UDK 677.494.674:539.92
Original scientific article/Izvirni znanstveni članek

ISSN 1580-2949
MTAEC9, 56(3)271(2022)

UNRAVELLING THE TRIBOLOGICAL BEHAVIOUR OF MERCERIZED COCONUT INFLORESCENCE FIBER FORTIFIED UNSATURATED POLYESTER COMPOSITES

POJASNITEV TRIBOLOŠKEGA OBNAŠANJA MERCERIZIRANIH INFLORESCENTNIH VLAKEN KOKOSOVIH OREHOV V OJAČANIH NENASIČENIH POLIESTERSKIH KOMPOZITIH

Karthik Soundararajan¹, Nitish Kaushik², C. Shanthi³, Joshua Gnana Sekaran⁴

¹Sri Krishna College of Engineering and Technology, Tamil Nadu

²Birla Institute of Technology, Jharkhand

³Sona College of Technology, Salem

⁴CSI College of Engineering, The Nilgiris

Prejem rokopisa – received: 2022-02-17; sprejem za objavo – accepted for publication: 2022-04-05

doi:10.17222/mit.2022.410

The need for eco-friendly materials made researchers move towards lignocellulose fibres as potential fortification materials for polymer matrices. In this regard, a unique fibre known as the coconut inflorescence fiber was extracted from the coconut tree and added to unsaturated polyester resin. As the fibres are subjected to mercerization treatment, XRD and FTIR studies show that the amorphous materials present in the fibers are removed, and the tensile strength of the fiber increases. For the tribology studies of the CF/polyester composite, the load and sliding distance were chosen as the operation parameters under dry-sliding condition. Extensive testing demonstrated that the wear rate increases as the load increases, and it is reduced as the fiber volume fraction increases. Due to the hardness of the composite materials, the wear rate decreases as the sliding distance rises. The composites with fiber volume fraction 25 % exhibit the minimum wear rate of the entire experimentation. Furthermore, the friction coefficient drops as the load and sliding distance increase with the increasing volume fraction, which is due to micro-melting generated by the frictional heat at greater loads. A SEM analysis revealed fiber pull-outs in composites with fiber volume fraction 30 %, owing to a lack of fibril wetting during the manufacturing of composites.

Keywords: coconut inflorescence fibre, unsaturated polyester resin, mercerization, wear, friction coefficient, SEM analysis

R&D | PAPER PUBLICATION | MECH

Dr. M. Vigneshkumar, Assistant Professor and Dr. P.AshokaVarthanan, HoD, Mechanical Engineering have published a scientific research article entitled 'Electrodeposition and corrosion characterization of epoxy/polyaniline coated AZ61 magnesium alloy' in the Journal of Corrosion Reviews- A Degruyter Publications. It is a WoS and Scopus Indexed Journal with Impact Factor 3.69. The journal is also listed in Anna University Annexure 1.

DE GRUYTER

Corros Rev 2022; 40(5): 491-499

Original Article

Vigneshkumar Murugesan* and Ashoka Varthanan Perumal

Electrodeposition and corrosion characterization of epoxy/polyaniline coated AZ61 magnesium alloy

<https://doi.org/10.1515/corrrev-2021-0069>
Received September 1, 2021; accepted April 28, 2022;
published online July 4, 2022

Abstract: An epoxy with 7% polyaniline (PANI) powder coating by electrostatic deposition is proposed to enhance the corrosion resistance of AZ61 magnesium alloys. The coating thickness is varied from 85 to 130 microns, and the results are compared to the corrosion resistance of epoxy coated and uncoated AZ61 magnesium alloy. The surface characterization and corrosion behaviour of AZ61 magnesium alloy + epoxy/PANI coating are examined using X-ray photoelectron spectroscopy, salt spray test, potentiodynamic test and Fourier transform infrared spectroscopy. It is observed that the polymer coating protects the base metal against corrosion and the corrosion resistance increases with coating thickness. The corrosion rate of the uncoated, 130 µm coating thickness of epoxy coated and epoxy/PANI coated AZ61 magnesium alloy is observed to be 0.5379, 0.0869 and 0.0372 mm/year, respectively. The corrosion resistance of epoxy/PANI coating is superior to the epoxy coating. The increase in corrosion resistance of the epoxy/PANI coated AZ61 alloy is attributed to the physical insulation and suppression of magnesium dissolution.

Keywords: epoxy; FTIR; magnesium alloy; polyaniline; XPS.

excellent machinability and less environmental impact (Phuong et al. 2017; Zhao et al. 2018). The commercial utilization of magnesium has increased rapidly in response to the requirement for light-weight in the transportation and electronics industry in the last 10 years (Gusieva et al. 2015). However, its poor corrosion resistance has limited its employment in a wide range of applications (Zhang et al. 2010). Magnesium is a group 2 alkaline metal that has two valence electrons in its outermost shell and low ionization energy. Hence it is thermodynamically unstable by often reacting with other atoms leading to the formation of an oxide, hydroxide or sulphide.

Magnesium is currently mostly used as cast magnesium components, rather than as an alloying element in other metal alloys. Several studies have found that corrosion on magnesium alloys is impacted by many factors, including chemical composition (Gusieva et al. 2015), grain size (Argade et al. 2012), intermetallic compounds (Gain et al. 2014) and distribution of α-Mg matrix phases (Shuai et al. 2019). Magnesium alloys are highly susceptible to under film and pitting corrosion than other forms of corrosion. The lower open corrosion potential of Mg matrix phases is attributable to the pitting corrosion of magnesium alloys (Zeng et al. 2014).

Mg is generally unstable and highly electroactive in aquatic conditions. The electrode potential of magnesium is less (-2.37 V). But the presence of higher electrode

R&D | SCIENTIFIC ARTICLE PUBLICATION | MECH

materialstoday:
PROCEEDINGS



Volume 68, Part 6, 2022, Pages 2653-2657

Mechanical behaviour of friction stir welded AA7075-T651 and AA6063-T6 joints - an experimental study

K.P. Yuvaraj^a, D.F. Melvin Jose^b, R. Sivasankaran^c, Nitish Kaushik^d, R. Karuppasamy^e, C. Shanthi^f

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<https://doi.org/10.1016/j.matpr.2022.09.561>

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Abstract

In this present study, the impact of axial force on the mechanical properties of friction stir welded dissimilar aluminium alloy joint was investigated. Four different axial forces such as 4kN, 5kN, 6kN, and 7kN were used. The tool rotating speed and welding speed of 2000 rpm and 60 mm/min respectively was employed. The microstructure of various zones of weld joint was investigated and observed using an electron optical microscope. The hardness and tensile characteristics of welded joints were investigated in order to determine their mechanical behaviour. Mechanical findings demonstrated that joints created with a 6kN axial force produced satisfactory joints. The creation of grain structures with evenly dispersed and

Dr. K P Yuvaraj, Associate Professor, Mechanical Engineering has published a scientific research article entitled **‘Mechanical Behavior of Friction Stir Welded AA7075-T6 and AA6063-T6 Joints - An Experimental Study’** in Materials Today Proceeding – an Elsevier Publications. It is a Scopus Indexed Journal.

R&D | INSTITUTION PATENT

Happy to share that the Faculty and Students of Department of Electrical and Electronics Engineering have successfully filed and published a Patent titled **“Smart Automated Prosthetic Leg”**. This project idea won the SIH - Hardware Edition at Forge Accelerator, Coimbatore. As the first step towards transforming ideas to vision, this patent was initiated.

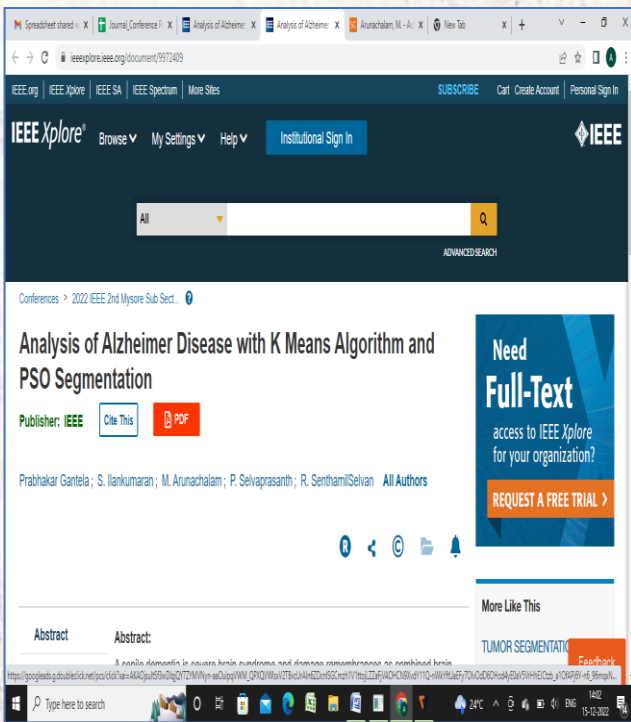
Application Details	
APPLICATION NUMBER	202241069815
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	03/12/2022
APPLICANT NAME	Sri Krishna College of Engineering and Technology, Coimbatore
TITLE OF INVENTION	Smart Automated Prosthetic Leg
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING
E-MAIL (As Per Record)	ramjitiwari@skcet.ac.in
ADDITIONAL-E-MAIL (As Per Record)	ramjitiwari@skcet.ac.in
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	09/12/2022
Application Status	

EEE | JOURNAL PUBLICATION



We are happy to share that the paper titled “**Weather Forecasting for Renewable Energy System: A Review**”, authored by **Dr.K.C.Ramya**, HoD, **EEE** Department has been published in **Springer** - Archives of Computational Methods in Engineering with a **high impact factor of 7.302**. Another paper titled “**Neural network based MPPT control with reconfigured quadratic boost converter for fuel cell application**”, authored by **Dr.Ramji Tiwari**, Assistant Professor, **EEE** Department has also been published in **Elsevier** - International Journal of Hydrogen Energy with a **high impact factor of 7.139**. This accolade sets the onset of R&D trendline rise with regard to Innovation Ecosystem of SKCET.

IT | R&D - CONFERENCE



Dr.M.Arunachalam, Professor, IT presented a paper titled "**Analysis of Alzheimer Disease with K Means Algorithm and PSO Segmentation**" in IEEE 2nd Mysore Sub Section International Conference, 2022 DOI: 10.1109/MysuruCon55714.2022.9972409 (Published in IEEE Xplore – Dec 2022).

R&D | PATENT PUBLICATION | ECE

Dr. V. Karthik, Assistant Professor of the ECE Department has filed and published a patent titled "**MI Based Automatic Abnormal Environment Detection Using Smart Surveillance in Banks**". The application number of the patent is 202241065428.

Application Details	
APPLICATION NUMBER	202241065428
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	15/11/2022
APPLICANT NAME	1. ARUNA 2. Kathiresan K 3. SAIBAL MAJUMDER 4. Dr. ARINDAM BISWAS 5. Dr. Kirti Mahajan 6. Nirmal Mungale 7. Dr. S. Sivaganesan 8. Dr. V. Karthik 9. Vijay Mohan Shrimal 10. Madhav sharma
TITLE OF INVENTION	ML BASED AUTOMATIC ABNORMAL ENVIRONMENT DETECTION USING SMART SURVEILLANCE IN BANKS
FIELD OF INVENTION	COMMUNICATION
E-MAIL (As Per Record)	arunav2@gmail.com
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	25/11/2022
Application Status	
APPLICATION STATUS	Awaiting Request for Examination

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TESTIMONIAL BY PLACED STUDENTS



AKKASH T, MECH (2021 BATCH)
Sanmina Corp.,

A better human being, a better developer and a dream to achieve something big are all, I hoped for when I joined Sri Krishna College of Engineering. I am delighted to say that the faculty members have helped me to achieve these dreams. Here, I not only had the chance to develop on my technical skills but also on other aspects such as Leadership and Management skills. The faculty members always inspired me to go above and beyond my capabilities. I would like to specially thank the placement cell for guiding me and providing me a good platform for my career. I am very much grateful to my parents for choosing SKCET. Thanks to our Principal Madam and entire SKCET faculty team.

TESTIMONIAL BY PLACED STUDENTS



**Harini P, IT(2021 BATCH),
Wipro**

As a student, I can say that SKCET is the best college to be at! The faculty members are very passionate and show their genuine desire to help students to achieve their goals. The college has great modern facilities which promotes great learning environment and flexible schedules that suit to meet the needs of a student like me. My college is different from all other engineering colleges because it not only focuses on the academics but also focuses on the overall development of a student. Our college takes the educational mission to heart, here you will find people who will support you and guide you on the path to your degree. SKCET has provided us a very enhanced and efficient platform for the exposure by training and placement department. I am very grateful to the placement team for providing us the best of placement opportunities. Thanks to my parents, SKCET Management, Principal and the entire SKCET family for the wonderful opportunity.

M.Tech. CSE | PLACEMENT TRAINING



Students of **Fourth year M.Tech Computer Science and Engineering** attended 5 Days Intensive Placement Training from **19th November to 23rd November 2022**. Recap on **Core Java Programming** Concepts were delivered by Placement Faculty Team **Dr.K.Senathipathi**, and **Ms. P.Keerthana**. Students were also undertaking skill rack, Neo Pat and assessment practice test.

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**TUTOR WARD
MEETING**



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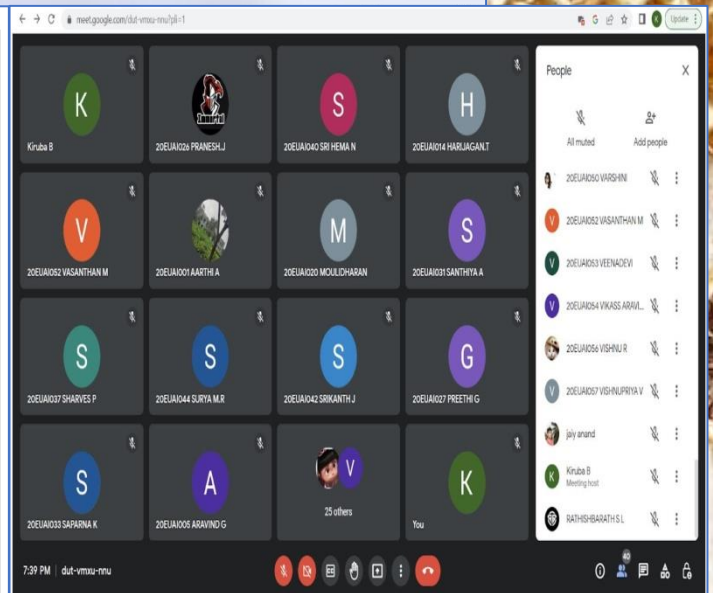
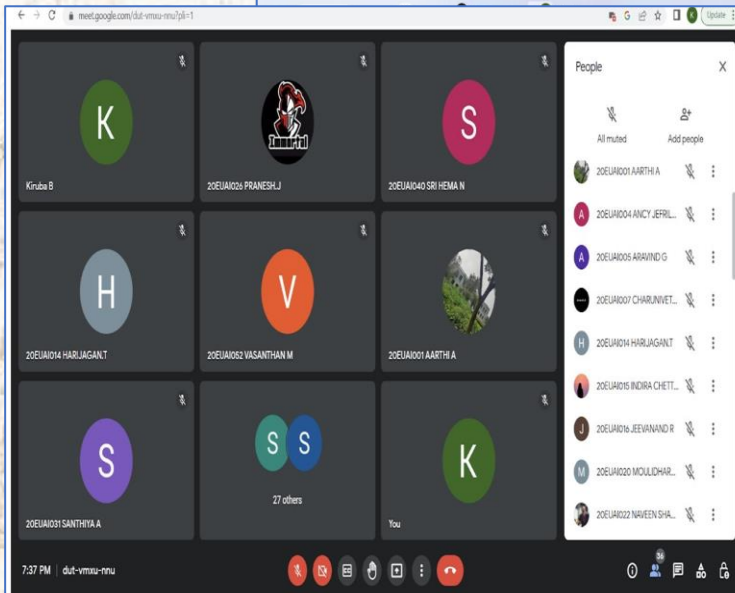
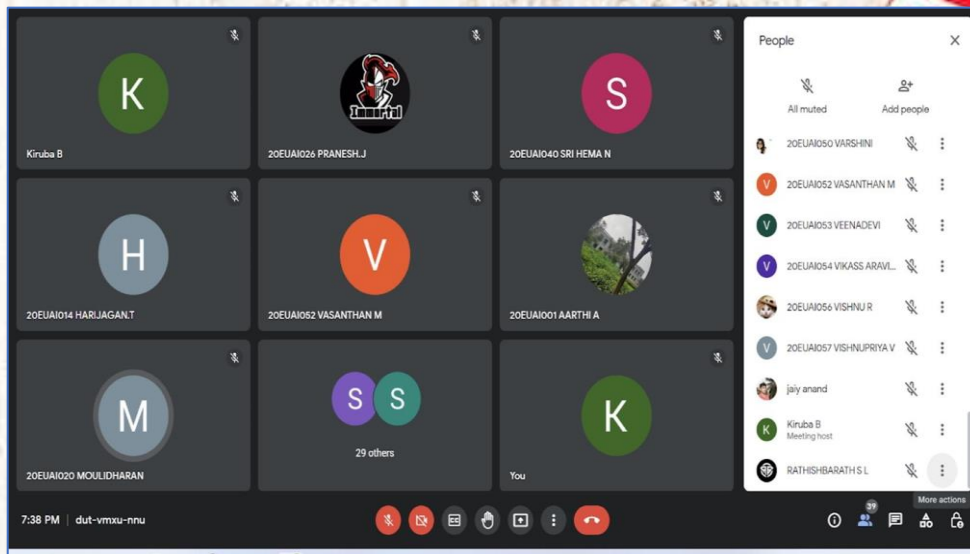


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AI&DS | TUTOR WARD MEETING



Ms.B.Kiruba, Assistant Professor, Department of **Artificial Intelligence and Data Science** conducted **Tutor Ward Meeting** for the **Third year** students on 14.12.2022 via Google Meet. The pointers of discussion were: Curriculum of the upcoming semester, motivated students to effectively participate in events and placement activities.

MCT | TUTOR WARD MEETING

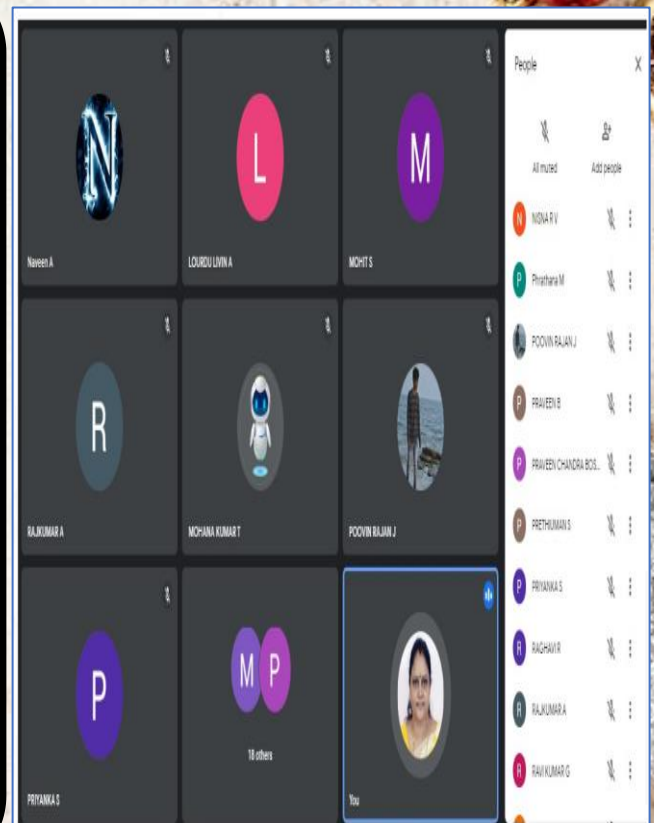


Mrs.K.Ananthi, Assistant Professor, MCT, has conducted **Tutor Ward Meeting** for the Second year lateral entry students on 17.12.2022. The pointers of discussion were:

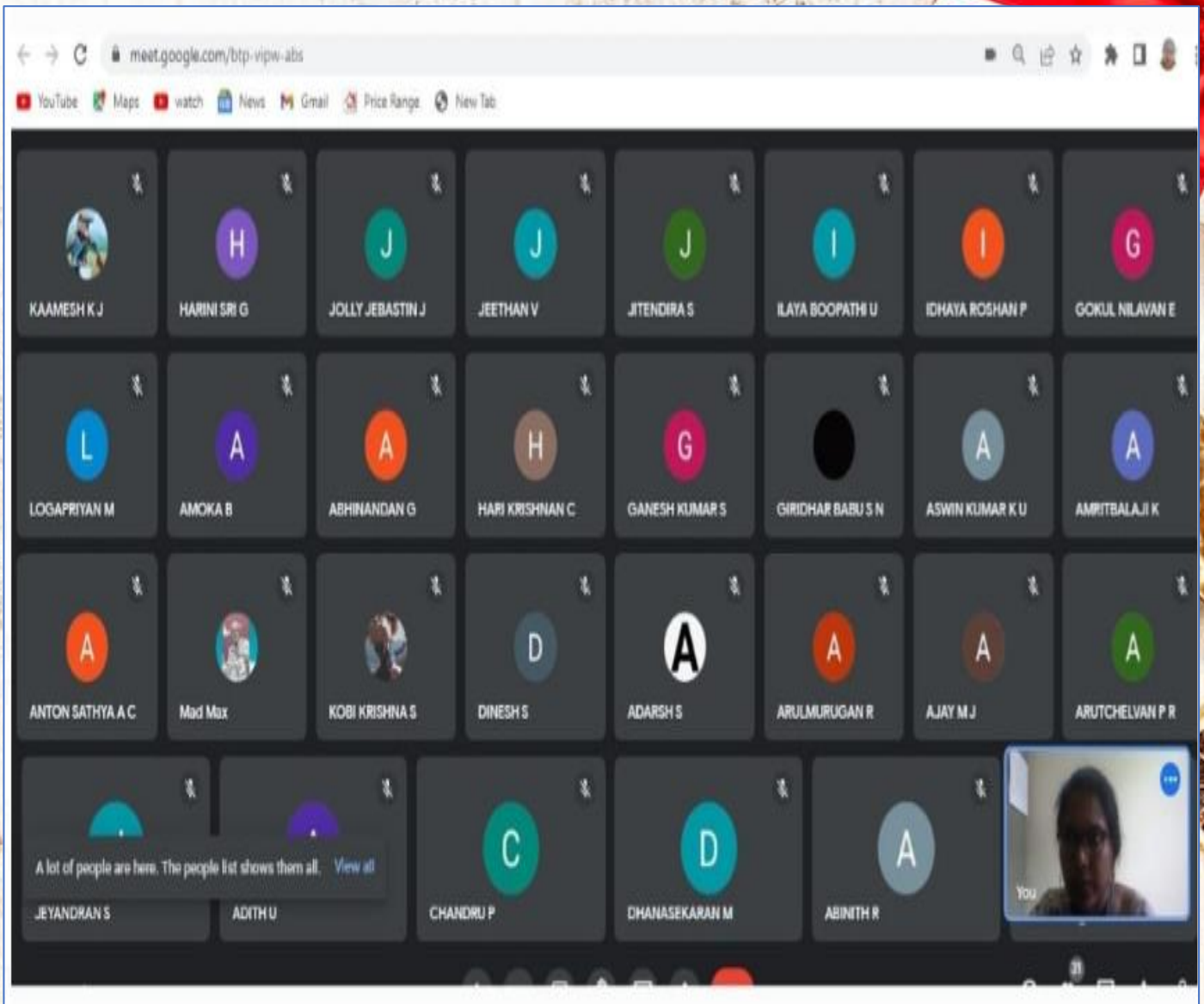
- Submission of Achievement certificates
- Preparedness for End semester examinations
- Instructions on Hall ticket print
- Avoidance of Malpractices
- Guidelines to be followed during exams

Dr.J.Indira priyadharshini, Assistant Professor, MCT, has conducted **Tutor Ward Meeting** for the Second year students on 17.12.2022. The pointers of discussion were:

- Submission of Achievement certificates
- Preparation for End semester examinations
- Instructions for exam, Hall ticket print-out
- Instructions to avoid malpractices



MCT | TUTOR WARD MEETING



Dr.D.Pritima, Professor, MCT conducted **Tutor Ward Meeting** for the Second year students on 17.12.2022. The pointers of discussion were:

- Instruction regarding Hall ticket printout, guidelines and avoiding malpractices inside the exam hall.
- Submission of event certificates
- End semester preparation and Healthcare.

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CIVIL | YOUNG RESEARCHER AWARD



Dr. R. Chandra Devi, Associate Professor, Department of **Civil Engineering**, was awarded the Young Researcher Award (Female) Category – Engineering/Technology. This was awarded by Science Technology Engineering Management Research Society in association with University Institute of Technology, Himachal Pradesh University, Shimla on December 17, 2022.

EEE | BEST MENTOR



Mr.S.Boobalan, Assistant Professor, EEE Department has been awarded as **“Best Mentor”** for mentoring the innovative idea/project for I EEE B section Students team entitled **“Agriculture With Extended Reality”** during **“ATOM Sympo 1.0”** Organized by Project Contest Innovations LLP., on 11-12-2022.

CSBS | IEEE CONFERENCE SESSION CHAIR

Dr.S.Balakrishnan, Professor and Head, Department of Computer Science and Business Systems has preceded an active role as Session Chair in the **IEEE International Conference on Service Operations and Logistics, and Informatics 2022** held in online mode from December 2-4, 2022 at New Delhi.



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**FACULTY
CERTIFICATION**



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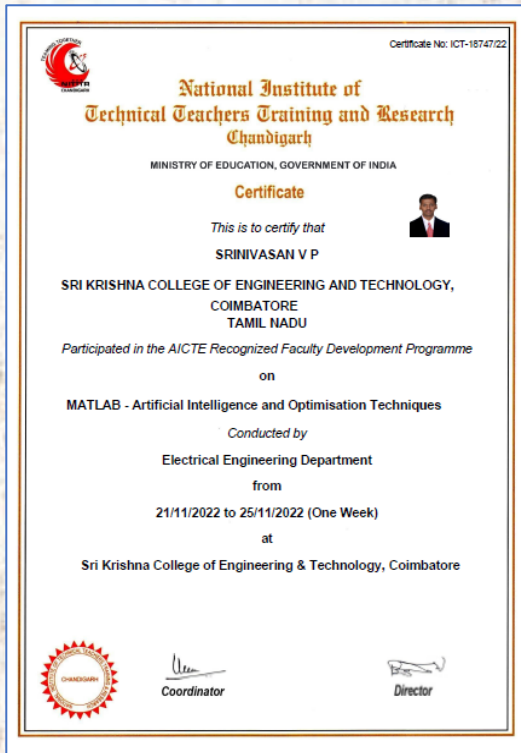


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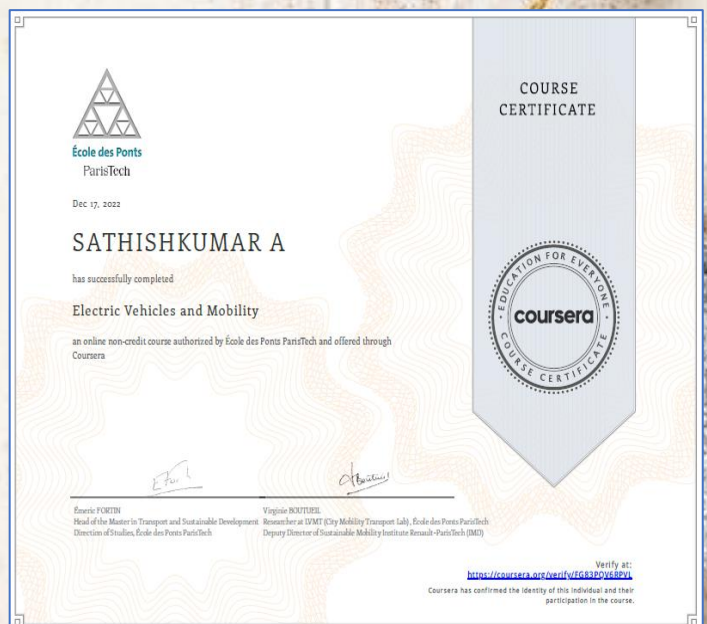
MECH | COURSE ON MATLAB – AI AND OPTIMIZATION TECHNIQUES



Dr. V P Srinivasan, Assistant Professor, **Mechanical Engineering** has actively participated in AICTE recognized Faculty Development Program on '**MATLAB – Artificial Intelligence and Optimization Techniques**' from National Institute of Technical Teachers Training and Research.

MECH | COURSERA CERTIFICATION

Mr. A. Sathishkumar, Assistant Professor, **Mechanical Engineering** completed a course on Electric vehicles and mobility developed by École des Ponts Paris Tech through Coursera.



MECH | COURSE ON GOOGLE DATA ANALYTICS



Mr.R.Siva Subramanian,
Assistant Professor, Mechanical Engineering actively participated in the two days online Faculty Development Program on **'Recent Advances in Robotics and Automation'** conducted by the Department of Mechatronics Engineering during 8.12.2022 to 9.12.2022.

MCT | MATLAB – ARTIFICIAL INTELLIGENCE AND OPTIMIZATION TECHNIQUES

Mrs.S.Kannaki, Assistant Professor of MCT has proactively participated in the one week online Faculty Development Program on **"MATLAB – Artificial Intelligence and Optimization Techniques"** conducted by NITTTR- Chandigarh from 21/11/2022 to 25/11/2022.



MCT | FACULTY DEVELOPMENT PROGRAM



Dr.L.Feroz Ali, Assistant Professor of MCT, has actively participated in the one week online Faculty Development Program on **“Research Scope in Electric Vehicles (in collaboration with ANSYS)”** from 05/12/2022 to 09/12/2022.

IT | FDP ON RECENT ADVANCES IN ROBOTICS & AUTOMATION

Dr.S.Durga, Associate Professor IT has participated in two days of online FDP on **“Recent Advances in Robotics and Automation”** conducted by the Department of Mechatronics Engineering from 08-12-2002 to 09-12-2022, SKCET, Coimbatore.

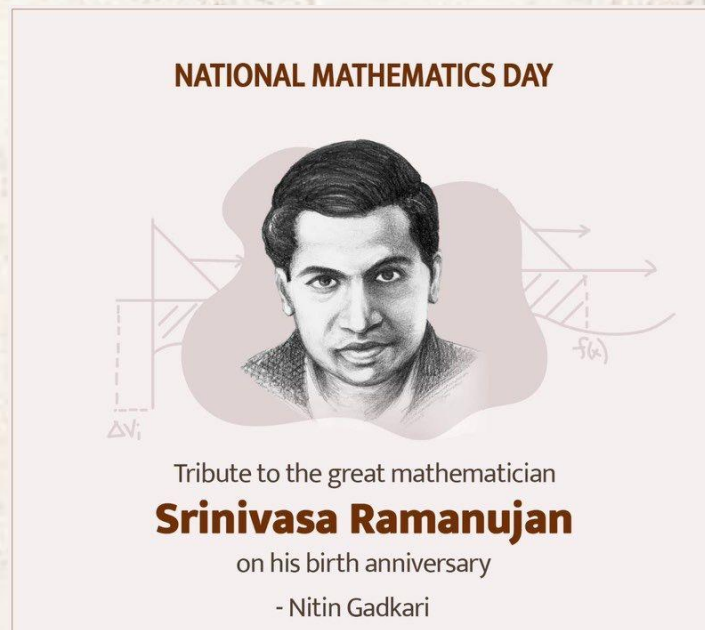


AI&DS | RECENT ADVANCES IN ROBOTICS AND AUTOMATION



Mr.G.S.Pugalendhi, Assistant Professor, Department of Artificial Intelligence and Data science has participated in Two Days Online Faculty Development Programme on “**Recent Advances in Robotics and Automation**” conducted by Department of Mechatronics Engineering on 8th and 9th December 2022 at Sri Krishna College of Engineering and Technology, Coimbatore

NATIONAL MATHEMATICS DAY



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ECE | REVIEWER - IEEE BANGALORE SECTION 2022



Dr. Senthil Ganesh, Assistant Professor, Department of **ECE** has served as a Session Chair for International Conference on Futuristic Technologies, during 25th and 27th November 2022.

ECE | CONFERENCE PRESENTATION



Dr. M. Ramkumar, Associate Professor, Department of **Electronics and Communication Engineering** has presented a paper titled, **“Detection and Diagnosis of Lung Cancer using Machine Learning Convolution Neural Network Technique”** in the Second International Conference on **“Smart Technologies”**, Communication and Robotics 2022 organized by the Bannari Amman Institute of Technology on 10-11 December 2022.

ECE | CONFERENCE PRESENTATION



Dr. V. Nandhalal, Professor, Department of **Electronics and Communication Engineering** has presented a paper titled, "**Ventricular Network Protocol with IOT in Traffic Scenarios with Safety Requirements – A Review**" in the IEEE International Conference on "**Power, Energy, Control and Transmission System**" held at Sri Sairam Engineering College, Chennai, Tamilnadu, India on 8th and 9th December 2022.

ECE | CONFERENCE PRESENTATION

Dr. M. Ramkumar, Associate Professor, Department of **Electronics and Communication Engineering** has presented a paper titled, "**IoT-Based Child Rescue System from Borewell**" in the 6th International Conference on Electronics, Communication and Aerospace Technology (ICECA 2022) organized by RVS Technical Campus, Coimbatore.



ECE | CONFERENCE PRESENTATION

Ms. Niranjana. R , Assistant Professor, Department of **Electronics and Communication Engineering** has presented a paper titled, “**Effectual Home Automation using ESP32 NodeMCU**” in the International Conference on “**Automation, Computing and Renewable Systems (ICACRS-2022)**”, organized by the Mount Zion College of Engineering and Technology.



ECE | CONFERENCE PRESENTATION



Dr. V. Nandhalal, Professor, Department of **Electronics and Communication Engineering** has presented a paper titled, “**A multicore ECU- Based Automation Software Domain Combining Runnable Sequencing and Task Scheduling**” in the International Conference on “**Automation, Computing and Renewable Systems (ICACRS-2022)**”, organized by Mount Zion College of Engineering and Technology.

ECE | CONFERENCE PRESENTATION

Ms. K. Priyadharsini, Assistant Professor, Department of **Electronics and Communication Engineering** has presented a paper titled, **“Performance Investigation of Handwritten Equation Solver using CNN for Betterment”** in the Second International Conference on **“Smart Technologies”**, Communication and Robotics 2022 organized by the Bannari Amman Institute of Technology.



ECE | CONFERENCE PRESENTATION



Mr. J. R. Dinesh Kumar, Assistant Professor, Department of **Electronics and Communication Engineering** has presented a paper titled, **“Performance Analysis of Inbuilt Hearing Aid using Signal Enhancement by Deep Learning”** in the Second International Conference on **“Smart Technologies”**, Communication and Robotics 2022 organized by the Bannari Amman Institute of Technology on 10-11 December 2022.

ECE | CONFERENCE PRESENTATION



Ms. K. Priyadharsini, Assistant Professor, Department of Electronics and Communication Engineering has presented a paper titled, “An Investigation on speech to Sign Language Transfer for Hearing Impaired (SSLT) using Machine Learning Techniques” in Second International Conference on “Smart Technologies”, Communication and Robotics 2022 organized by Bannari Amman Institute of Technology.

WRITE IT RIGHT

LAWYER	ATTORNEY
<p>Lawyers are legal professionals who are trained in the law. Such professionals might offer legal guidance to another, or might not.</p>	<p>Attorneys are also lawyers. They are people who attend law school and presumably wish to practice law as a legal professional, pursuing it as a profession.</p>
<p>Examples</p> <ul style="list-style-type: none"> • Her <u>lawyer</u> made a statement outside the court. • We employed a <u>lawyer</u> to straighten our legal tangle. • Have you consulted your <u>lawyer</u> about this? • I advise you to withdraw your allegation before I contact my <u>lawyer</u>. • He was the <u>only lawyer</u> who would touch the case. 	<p>Examples</p> <ul style="list-style-type: none"> • She was made her father's <u>attorney</u> when he became ill. • As an <u>attorney</u>, he represented the poor free of charge. • <u>Attorney</u> Robert Rivas answers yes to both questions. • The car seller agreed to escrow the sum of \$2000 with her <u>attorney</u>. • In November, the millwrights' local voted to hire me as their <u>attorney</u>.

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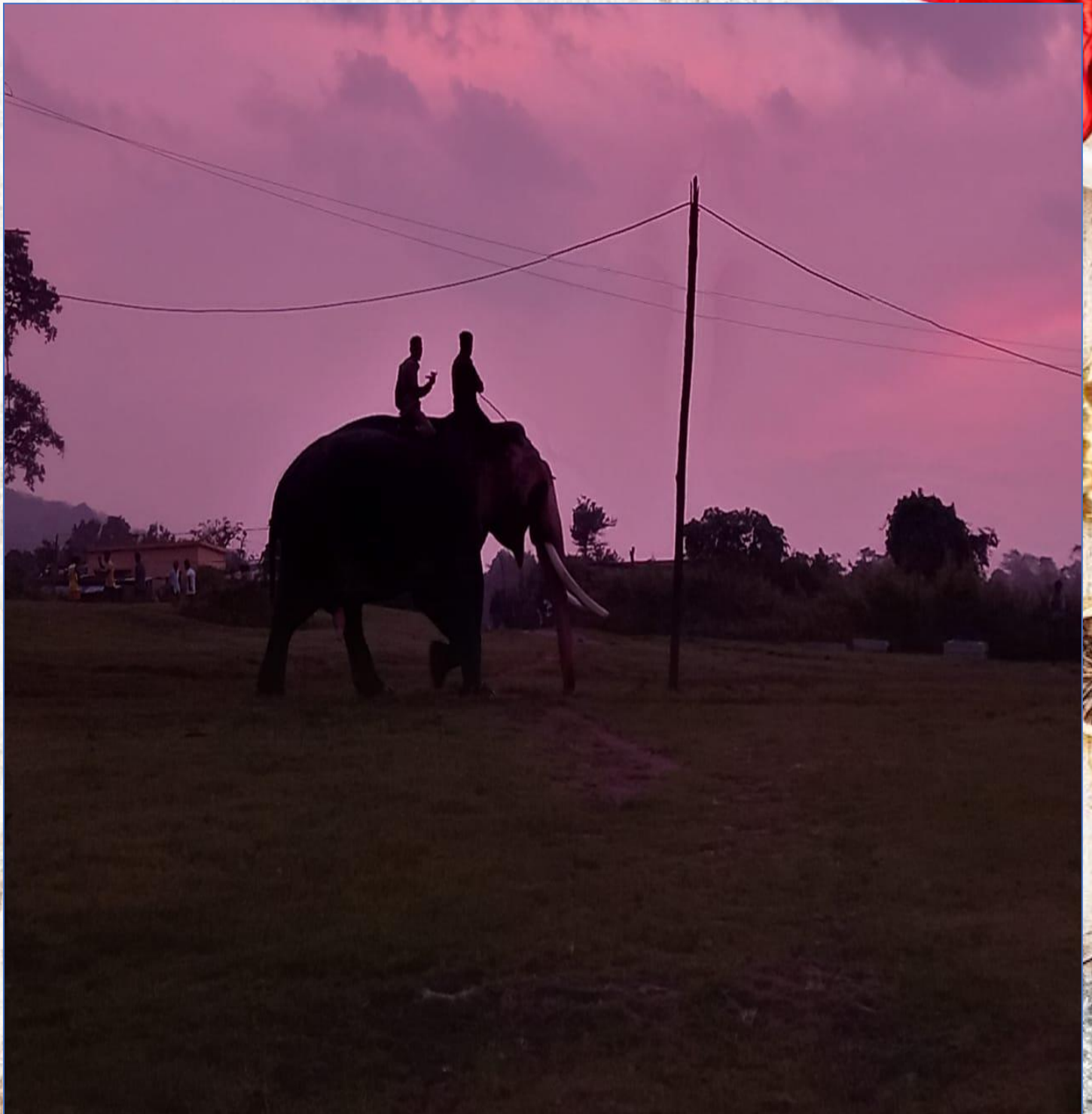


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EEE | CAM CURVE



Surjith Surya.V
III Year EEE B

S&H | CREATIVE CORNER

NATIONAL MATHEMATICS DAY

Mathematics is the queen of Science and Technology. Mathematics has always been a subject of extreme. The word 'mathematics' gives shock to most of the students including the writer, whereas there is a small group who loves it to the core.

The advancement of human civilization can be somewhat attributed to this subject. Many courses such as Numerology, robotics and automation also have their origin in Mathematics. The credit for all these belongs to one and only Mr. Srinivasa Ramanujan. To pay tribute to him, 22nd December 1887, his birthday is celebrated as the **NATIONAL MATHEMATICS DAY**. The Theory of Numbers developed by him became an asset, based on which, infinite series and combination and even probability were developed. The Law of Averages and even the logic of mathematical analysis were invented by this great mathematician.

Main motto of mathematics day celebration is to make people aware of the significance of numbers in life. According to Ramanujan, "**Numbers do speak**". On this very special day, The Science and humanities department of our college has organized a camp and training session for both the teachers and students to enrich their mathematical skills.

Nothing can be more apt than to remember this genius through the celebration of mathematics day. The talent and work of Ramanujan are appreciated and followed across the globe up to this date. Mathematics is the base of all things around us and is celebrated, the greatness of math and Ramanujan is observed yet again on this special day.

**GOKUL M
I M.TECH CSE**

M.Tech. CSE | STUDENT ARTICLE

NATIONAL MATHEMATICS DAY

National Mathematics Day is celebrated as the birth anniversary of India's famed mathematician **Srinivasa Ramanujan**. Ramanujan is considered as one of the greatest minds in the field of mathematics. The analytical mind was much in evidence as he could simplify and extend the notes within a short time period. **"He could reduce difficult solutions to be simple and elegant due to his deep knowledge of the subject matter"**.

RAMANUJAN'S MAGIC SQUARE:

22	12	18	87
88	17	9	25
10	24	89	16
19	86	23	11

1. The sum of any column is 139
2. The sum of any row is 139
3. The sum of diagonal elements is 139.
4. The sum of any 2x2 box is 139.
5. The sum of corner elements is 139.

The first row 22 12 18 87 is special because it is Ramanujan's Birth date 22/12/1887.

1729: THE MAGIC OF HARDY – RAMANUJAN NUMBER :

The Hardy-Ramanujan number is named such after an anecdote of the British mathematician G.H. Hardy who had gone to visit S. Ramanujan in hospital. The anecdote is a part of Ramanujan's biography **'The Man Who Knew Infinity' by Robert Knaigel**.

Mr. Hardy quipped that he came in a taxi with the number '1729' which seemed a fairly ordinary number. Ramanujan said that it was not. 1729, the Hardy-Ramanujan Number, is the smallest number which can be expressed as the sum of two different cubes in two different ways.

1729 is the sum of the cubes of 10 and 9 - cube of 10 is 1000 and cube of 9 is 729; adding the two numbers results in 1729.

1729 is also the sum of the cubes of 12 and 1 - cube of 12 is 1728 and cube of 1 is 1; adding the two results in 1729.

From these incidents it is quite obvious that Ramanujan is one of the greatest analytical minds whom the history has come across. His contribution extends to mathematical fields such as complex analysis, number theory, infinite series, continued fractions and much more.

The old saying. **"Those whom Gods love die young"** was true in Ramanujan's case; he died at less than 33 years of age, hardly at one-third of the normal life-span. **Such was the triumph and tragedy of a genius!**

AJAY GANAPATHY K H , III M.Tech CSE

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CIVIL | UPCOMING EVENT



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World Soil Day Celebration

Department of Civil Engineering
(Accredited by NBA)

&

SKCET National Service Scheme



Institution's Innovation Council (IIC)

Resource Person

Ms. D. Ranjini B.E., M.E.,

Chief Geotechnical Engineer

Geodesign India Private Limited

Coimbatore



Organizes

Guest Lecture on

“Soil and Foundations in Civil Engineering”

Date: 21.12.2022

Coordinator

Dr. R. Chandra Devi

Associate Professor/Civil

Time: 11.00 am to 12 Noon

Venue: C4 - 17

Convenor

Dr. D. Maruthachalam

Professor & Head-Civil



SKCET Indian Geotechnical Society
Student Chapter