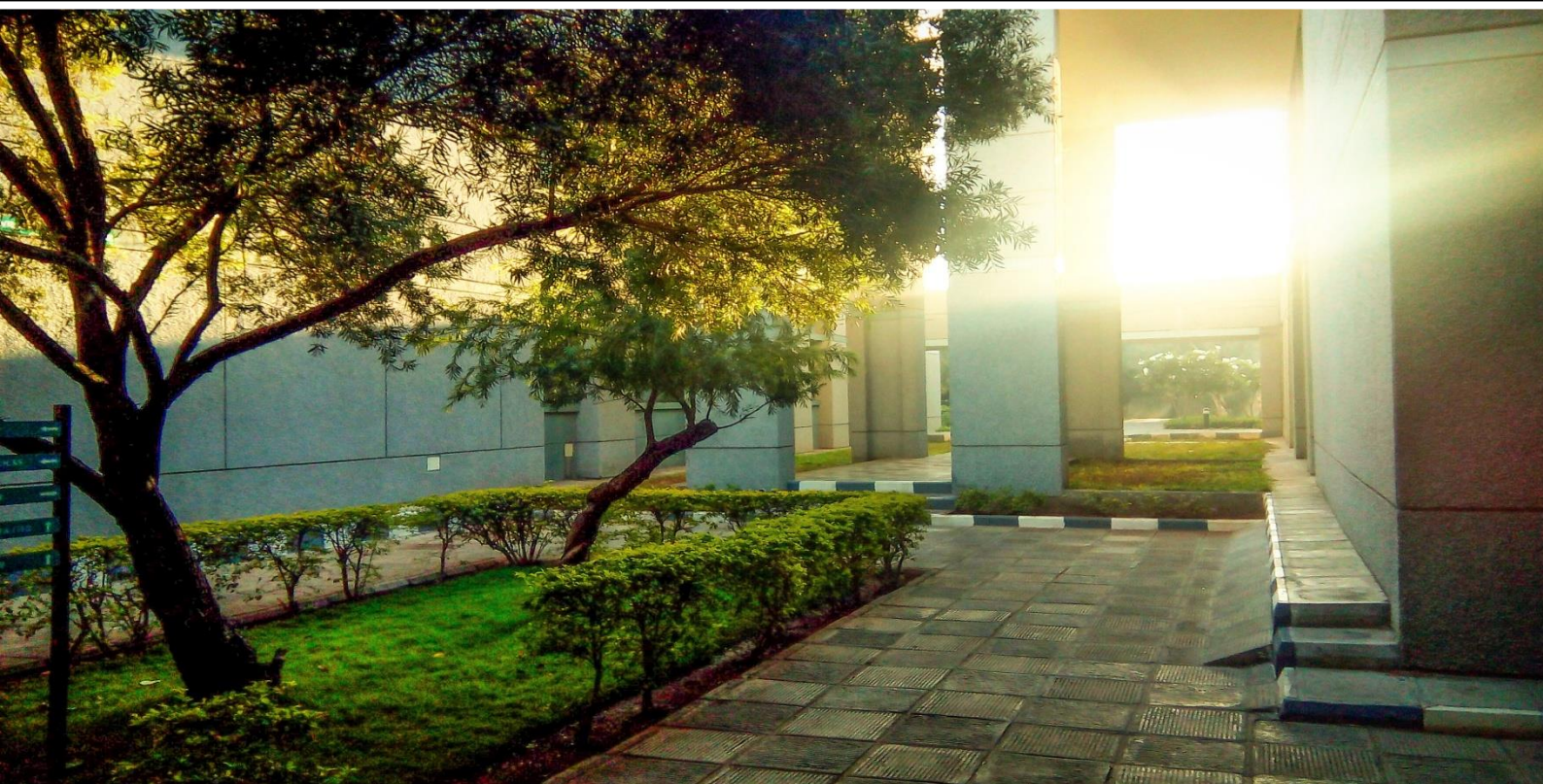


SKCET

Buzz



20th - 26th July 2024



Editor-in-Chief
Dr. K. Porkumaran

Principal

Co-Editor

Dr.S.Venkata Lakshmi - AI & DS

Editorial Team

Mr.G.S.Pugalendhi - AI & DS,

Mr.M.Diwakaran - IT,

Mrs.S.Mary Fabiola - S&H,

Mr.J.Dhiyaneswaran - MECH

INSIDE THIS ISSUE

- ❖ **INSTITUTIONAL EVENTS** : PG 03 - 05
- ❖ **STUDENTS PROGRESSION** : PG 06 - 09
- ❖ **EVENTS** : PG 10 - 15
- ❖ **TUTOR WARD MEETING** : PG 16 - 17
- ❖ **PLACEMENT AND TRAINING** : PG 18 - 22
- ❖ **RESEARCH AND DEVELOPMENT** : PG 23 - 24
- ❖ **FACULTY PROGRESSION** : PG 25 - 26
- ❖ **FACULTY CERTIFICATIONS** : PG 27 - 31
- ❖ **ALUMNI CORNER** : PG 32 - 33
- ❖ **CREATIVE CORNER** : PG 34 - 40

SKCET

Buzz



**INSTITUTIONAL
EVENTS**



Follow us
@



#skcetofficial



#skcetofficial



#skcet



#skcetofficial



Feedback@
skcetbuzz@skcet.ac.in

ECE | IEEE GLOBAL LEADERSHIP MEET 2024



IEEE Global Leadership Connect was held at Chennai. Dr.K.Porkumaran, Principal SKCET, IEEE MAS chair welcomed the dignitaries. Dr. V. Nandalal, IEEE SKCET Student Branch Counselor along with IEEE S. Akash, SKCET Chair, (IV ECE A) attended the IEEE Global Leadership Connect, a prestigious gathering of leaders, innovators, visionaries and students. Dr. Thomas Coughlin, IEEE President, Dr. Kathleen A. Kramer, IEEE President Elect along with other prominent dignitaries chaired the event.

Key Takeaways:

- Rapid Advancement of IEEE
- Technical Societies and Councils of IEEE

SKCET IIC: INNOVATION AND ENTREPRENEURSHIP EXPOSURE VISIT



Institution's Innovation Council of SKCET organized a Two-day **Innovation and Entrepreneurship Exposure Visit** from 18th to 19th July 2024, as part of the Mentor Mentee Scheme. Faculty representatives from 5 mentee Institutions, viz, Danish Ahmed Engineering College, RVS Technical Campus, Sri Ranganathar Institute of Technology, Jai Shriram Engineering College and Easa Engineering College have participated in this programme. **Dr. P. Ashoka Varthanan**, Dean R&D and Innovations, HOD Mechanical Engineering delivered the welcome address and provided insights into the robust innovation ecosystem at SKCET, highlighting the numerous achievements. **Dr. K. Porkumaran**, Principal, SKCET delivered the inaugural address and highlighted the vast opportunities available in the field of defense startups, role of innovation and entrepreneurship.

SKCET



STUDENTS PROGRESSION



Follow us
@



#skcetofficial



#skcetofficial



#skcet



#skcetofficial



Feedback@
skcetbuzz@skcet.ac.in

ECE | DRONE – RPC (REMOTE PILOT CERTIFICATE)

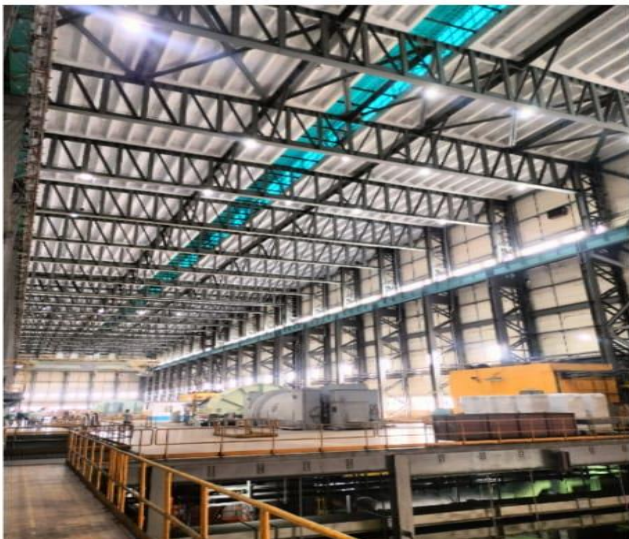


Madhavan.K, student of **Final year ECE** has successfully completed Remote Pilot Certification. A remote pilot certificate is important because this license can only be issued by an authorized institution after proper training and evaluation of an individual's specialization for operating a particular class or classes of drones. This license is valid for 10 years and can be renewed with an application. This license is issued by DCGA only after receiving and carefully evaluating the certificate of training and report of skill sets by an authorized institution.

RPC TRAINING ADVANTAGES AND SKILL SETS ACQUIRED:

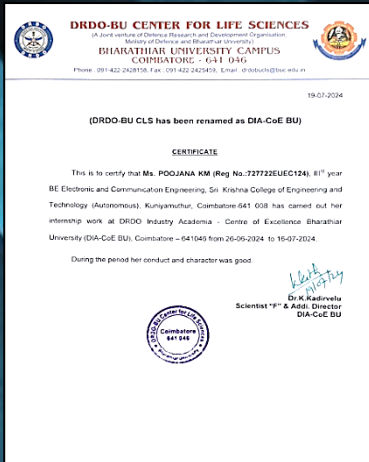
- Navigation Skills
- Communication
- Problem-Solving
- Regulatory Knowledge
- Data Responsibility and Detail Orientation

EEE | INPLANT TRAINING @ NLC



Thirteen students from the **Second year EEE 'A' batch** have embarked on an exceptional journey for **In-Plant Training at Neyveli Lignite Corporation India Limited (NLC)**, Neyveli from July 15th to July 20th, 2024, offers a golden opportunity for the students to gain hands-on experience and in-depth practical knowledge of NLC's operations. Throughout their time at NLC, the students will engage in immersive plant visits, uncovering various fascinating aspects of the corporation's work. This exposure is expected to enhance their understanding of real-world applications in the field of electrical and electronics engineering, bridging the gap between theoretical learning and practical implementation.

ECE | INPLANT TRAINING



Following students from Third year **ECE** have attended the summer Inplant training/Internship in various organization

S.No	Name of The Student	Organization
1	K M Poojana	DRDO-BU Centre for Life Science, Bharathiar University, Coimbatore
2	T Logendra Prasanna	DRDO-BU Centre for Life Science, Bharathiar University, Coimbatore
3	Rajashanthini R	Tamilnadu Generation and Distribution Corporation Ltd (TNEB), Erode
4	J R Krishna	Worley India Private Limited, Mumbai
5	J R Krishna	IREL(India) Limited, KK District
6	S J Josika	Salem Steel plant, Salem

SKCET



EVENTS



Follow us
@



#skcetofficial



#skcetofficial



#skcet



#skcetofficial



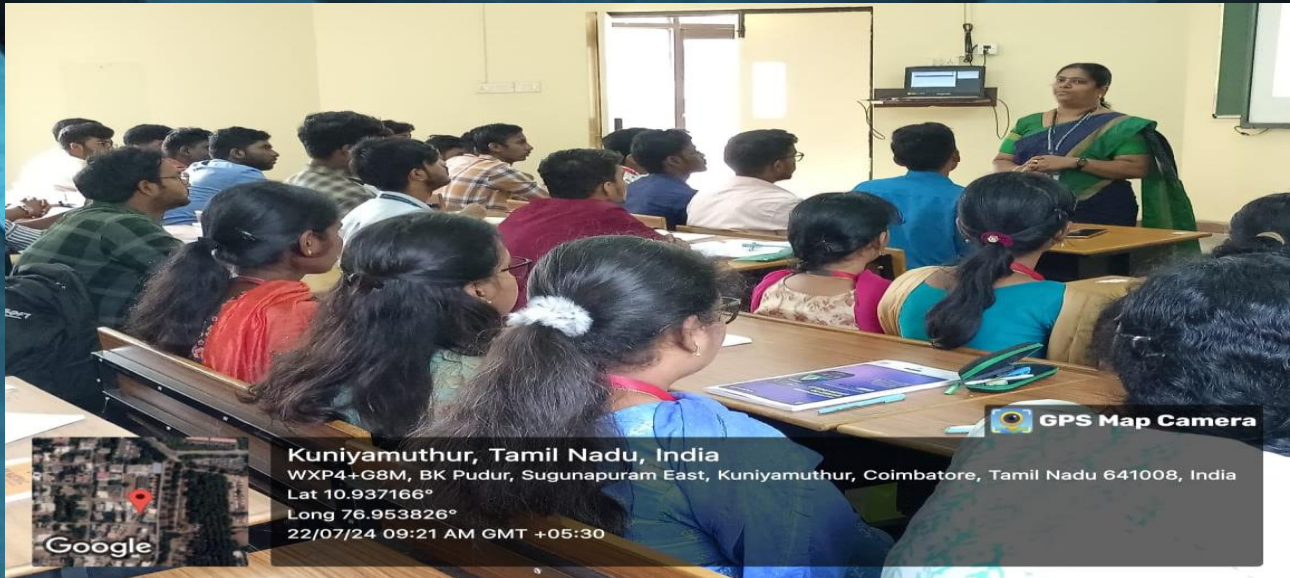
Feedback@
skcetbuzz@skcet.ac.in

EEE | HOD INTERACTION



Dr.K.C. Ramya, HoD, EEE welcomed the **Second** year students for the academic year 2024-2025 on 22.07.2024. Students were encouraged to actively participate in various development programs and co-curricular activities, emphasizing the importance of identifying and utilizing these opportunities to achieve their goals. She also stressed the need for students to maintain discipline and decorum within the campus. Importance of industrial course sessions was also briefed to the students.

EEE | HOD INTERACTION



Dr.K.C. Ramya, HoD, EEE welcomed the Pre - final year students for the academic year 2024-2025 on 22.07.2024. The key points addressed were.

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

MCT | ASSOCIATION INAUGURATION & GUEST LECTURE



Department of **Mechatronics Engineering** inaugurated its Association (MEA) and introduced the office bearers of Mechatronics Engineering Association. A Guest Lecture on Emerging “**Global Trends in Electric Mobility and Opportunities for Young Engineers in EV Industry**” on 23.07.2024 as a part of the Inauguration Programme.

Resource Person: Mr. Bharath NB, Engineer, Brakes R&D India HL Mando Anand India Pvt. Ltd. Sriperumbudur, Kanchipuram

Session Highlights:

- Autonomous Electric Vehicles
- Job opportunities in EV Industry
- E-mobility Roadmap.

ECE | TWO DAYS WORKSHOP ON INNOVATE WITH RASPBERRY Pi PICO



Department of **ECE** organized Two days workshop on “**Innovate with Raspberry Pi Pico**” on 24.07.2024 and 25.07.2024 Lab for the **Second** year students.

Resource Persons: Mr.S.Pradeep, and Mr.B.Prasanna Robotic Engineers, Robomatiic pvt Ltd Coimbatore.

Session Highlights: Introduction to Raspberry Pi Architecture, Features of Raspberry Pi Pico, Significance of MicroPython, Introduction to MicroPython Programming, MicroPython Datatypes, Looping, Functions and Default Arguments in MicroPython , Pattern Programming and Hands-on Session on Thonny IDE.

SKCET IIC: INNOVATION AND ENTREPRENEURSHIP EXPOSURE VISIT



DAY 1:

Resource Person: **Mr. Ram Sundar**, a renowned trainer and entrepreneurship development expert & **Mr. Vivekanandan Ragunathan**, Co-Founder of Master Academy.

Session Highlights: Shaping future leaders and innovators within academia Design Thinking and Business Model Canvas, practical tools and methodologies for fostering innovation and creating robust business models.

Day 2:

Resource Person: Dr. K. M. Sakthivel IPR Cell Co-ordinator & Mr. Gautham Sitharth G, Managing Director of Linga Group of Companies

Session Highlights: Importance of IPR in Educational Institutions and Startups, intellectual property rights, entrepreneurship and business management strategies.

Dr. P. Ashoka Varthanan, IIC Convenor, Dean R&D and HoD of Mechanical Engineering recognized the participants with certificates.

SKCET

Buzz



**TUTOR WARD
MEETING**



Follow us
@



#skcetofficial



#skcetofficial



#skcet



#skcetofficial



Feedback@
skcetbuzz@skcet.ac.in

AI&DS | TUTOR WARD MEETING



Mr.G.S.Pugalendhi, Assistant Professor, Department of **Artificial Intelligence and Data Science** conducted **Tutor Ward Meeting** for the **Second year B** section students on 24.07.2024.

Pointers of discussion:

- Curriculum of the upcoming semester
- Problem of the day
- Importance of daily attendance
- Motivated students to effectively participate in Hackathons, Events and placement activities effectively.

SKCET



PLACEMENT AND TRAINING



Follow us
@



#skcetofficial



#skcetofficial



#skcet

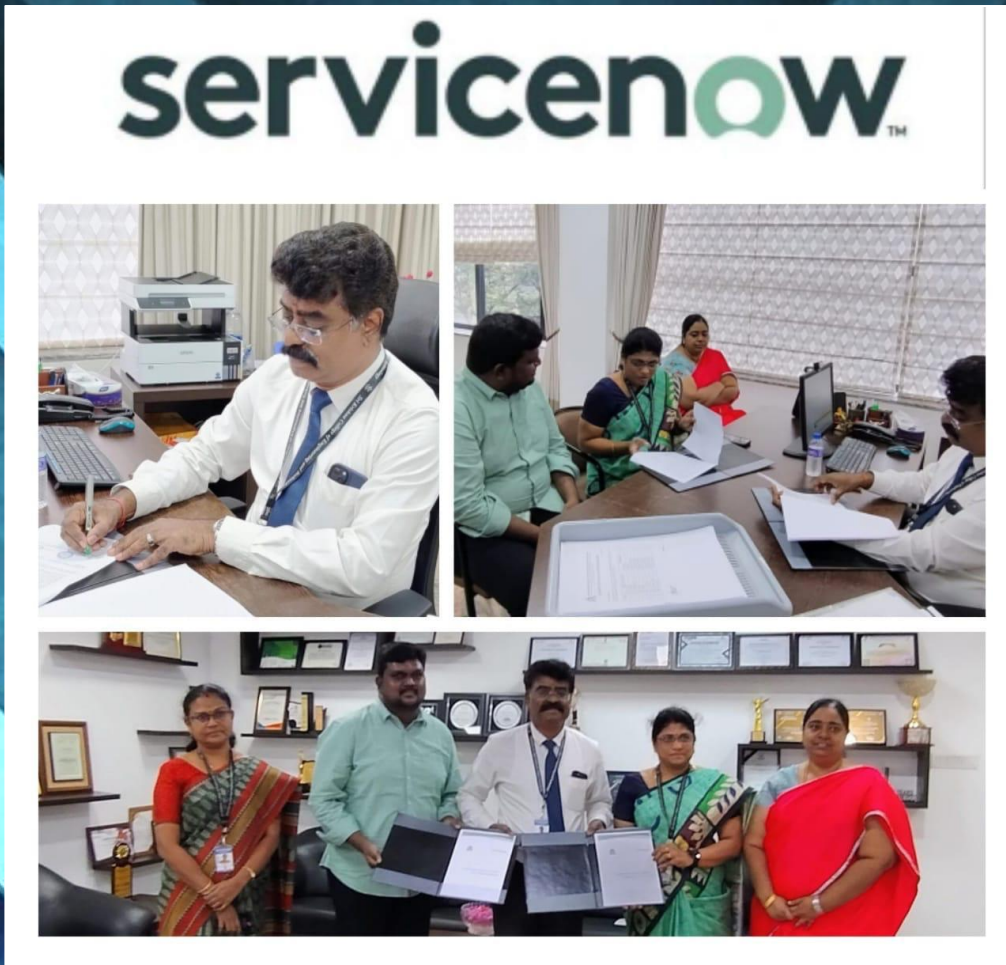


#skcetofficial



Feedback@
skcetbuzz@skcet.ac.in

SKCET | SERVICE NOW MOU SIGNING AND EXCHANGE CEREMONY



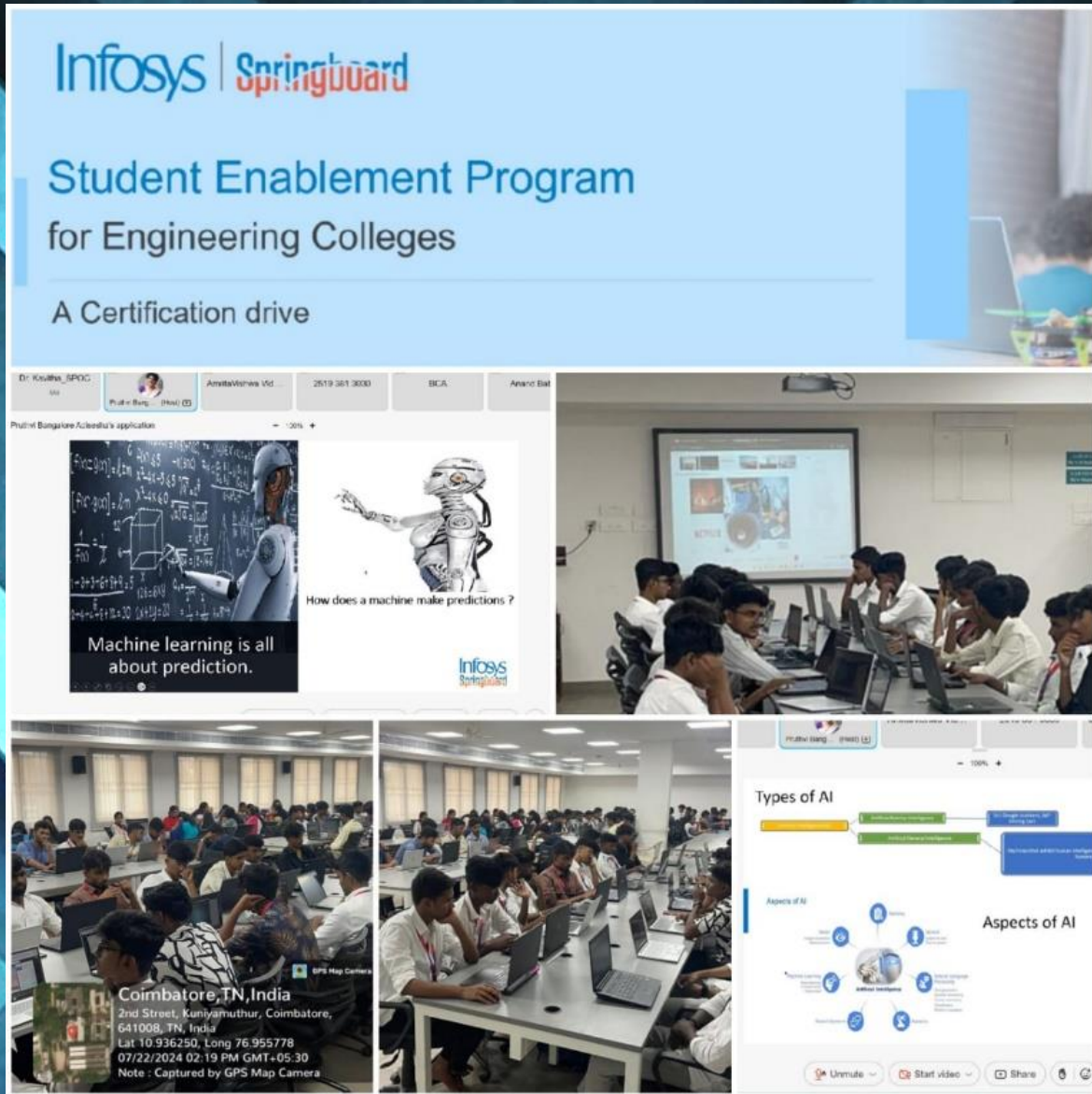
Dr.K.Porkumaran, Principal signed and exchanged MoU for Certified System Administrator (CSA) and Certified Application Developer (CAD) certification program with Service Now.

Service Now Certified students will get opportunities with CTC of 6 LPA - 9 LPA for niche roles in product and IT companies.

Highlights

- Setting-up learning environment
- Virtual instructor-led training, interview preparation sessions
- Technical sessions, Mock Tests, Mock Interviews for students
- ServiceNow virtual internship program

SKCET | INFOSYS SPRINGBOARD STUDENT ENABLEMENT PROGRAM(SEP)



Students of Second and Third year AI&DS attended 3 days workshop offered by Infosys Springboard - Student Enablement Program (SEP) on Artificial Intelligence.

Highlights of the Workshop:

- Aspects of AI
- Importance of Machine Learning
- Types of Learning in ML

PLACEMENT TESTIMONIALS

I am Nafis Roshan N, a Mechanical Engineering graduate from the Batch 2024. My time at SKCET has been instrumental in honing my academic and non-academic skills. SKCET has provided unwavering support, fostering an environment for learning and growth. Through rigorous coursework and practical exposure, I have gained expertise in areas such as IoT, CAD and hands-on application of theoretical concepts. Overall, SKCET nurtures an environment ideal for a rewarding educational journey. My sincere appreciation goes to the placement cell for their invaluable guidance, leading to my placement at JSW. I am deeply grateful to my parents, friends, the SKCET management, Principal and the entire SKCET family for providing me with this enriching opportunity.

**NAFIS ROSHAN N,
MECH, JSW**



PLACEMENT TESTIMONIALS

I'm **Stanely G**, a proud Mechatronics graduate from SKCET. SKCET's meticulous curriculum and dedicated faculty members have not only equipped me with technical expertise but also instilled in me the ability to adapt and excel in dynamic environments. Securing placements in renowned companies like TCS, Mu Sigma, and Accenture is a testament to the quality education and training provided here. I'm immensely thankful to my parents and the entire SKCET community for their unwavering support. SKCET has truly been a stepping stone towards my career success, and I'm excited to embark on this new journey with confidence and enthusiasm.

**Stanely G, MCT
Accenture**



SKCET



**RESEARCH AND
DEVELOPMENT**



Follow us
@



#skcetofficial



#skcetofficial



#skcet



#skcetofficial



Feedback@
skcetbuzz@skcet.ac.in

R&D | JOURNAL PUBLICATION | EEE

Received: 6 November 2023 | Revised: 1 June 2024 | Accepted: 5 July 2024 | IET Renewable Power Generation
DOI: 10.1049/rpg2.13058

ORIGINAL RESEARCH

Optimized DBN-based control scheme for power quality enhancement in a microgrid cluster connected with renewable energy system

Narendiran Sivakumar¹ | Jaisiva Selvaraj² | Karthika Jayaprakash³ | Kinde Anlay Fante⁴

¹Department of Electrical and Electronics Engineering, Chulal Institute of Engineering and Technology, Rajpet, Tamilnadu, India
²Department of Electrical and Electronics Engineering, Sri Krishna College of Engineering and Technology, Coimbatore, Tamilnadu, India
³Department of Electrical and Electronics Engineering, Sri Krishna College of Engineering and Technology, Coimbatore, Tamilnadu, India
⁴Faculty of Electrical and Computer Engineering, Jimma Institute of Technology, Jimma University, Jimma, Oromia, Ethiopia

Abstract
The increasing energy consumption and changing load variations place a significant burden on the sophisticated utility grid, which affects the source's dependability and quality. Researchers examining modern power networks must focus on those factors to prevent grid breakdowns. Superior power quality (PQ) is still intended to make sure everything runs smoothly under diverse organizations. The main cause of PQ problems, however, is now renewable energy used in power electronic converters that are integrated into the electrical grid. Even though new, better solutions are still being developed, adhering to international standards have been strongly advised. Consequently, microgrid clusters powered through renewable energy and incorporating multiple structures in an urban area has been proposed in this paper. This increases the dependability of the power sources by managing the energy that is available inside the cluster instead of having it focused around the utility grid. Additionally, a deep belief network model based on Improved Dwarf Mongoose Optimization is recommended for regulating the inverter by generating optimal pulse-width modulated signals that increases the quality of the power supplies. When compared to other conventional techniques, the suggested technique possesses less real power and reactive power setting duration of 0.8 ms and 0.75 ms, respectively.

1 | INTRODUCTION
By 2050, it is predicted that there will be 9.7 billion people on the earth, with a rise in the percentage of people living in urban areas from 4.2 billion to 6.7 billion, or a rise of 55% [1, 2]. This will result in a significant increase in the consumption of traditional energy sources. Using the required energy sources, it is crucial to meet the load requirements of people around the world. A discussion of PQ consequently seems to have significant consequences given the present state of renewable energy systems (RES) and their frequent connection towards distribution networks [3]. As a result, several research works have been conducted to create microgrids employing distributed power production. Microgrids were first developed to supply electricity in locations where access to limited traditional power sources [4, 5]. The microgrids of these areas are configured to function in both grid-dependent and self-regulating modes. Combining low-power materials within a virtual or microgrid power station has emerged as the authentic method for boosting distributed energy supply and RES efficacy [6–8].
Such networks have many characteristics, including a large number of semiconductor devices, unpredictable RES, and dual-direction power transfer. It is therefore crucial to ensure the required PQ metrics, such as voltage changes, frequency deviations, non-sinusoidal, and general harmonic distortion [9, 10]. Over the past few decades, researchers have developed a wide range of optimization techniques, filtering, control systems, FACTS device compensators, and battery pack storage mechanisms, to address the PQ issues that microgrids experience [11–13].
The adaptation-based control approach has been recommended to enhance the PQ factors in a power control centre (PCC) of three-phase dispersion device. The regulation strategies aim to equalize the currents of three phases and incorporate the structure's reactive power [14]. The microgrid's power conversion devices are managed to make sure that the standards

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.
© 2024 The Author(s). IET Renewable Power Generation published by John Wiley & Sons Ltd on behalf of The Institution of Engineering and Technology

Dr.J.Karthika, Professor, Department of **EEE** has published a paper entitled “**Optimized DBN-based control scheme for power quality enhancement in a microgrid cluster connected with renewable energy system**” in IET Renewable Power Generation. It is indexed in Scopus & Science Citation Index Expanded (Q2) journal with an impact factor of 2.1.

R&D | JOURNAL PUBLICATION | ECE

Mr.S.P.Karthi, Assistant Professor, Department of **ECE**, has published SCI and Scopus indexed Journal titled “**Detecting and Classifying Parametric Faults in Analog Circuits Using an Optimized Attention Neural Networks**” in the Journal, Circuits, Systems, and Signal Processing. **DoI:** <https://doi.org/10.1007/s00034-024-02722-1>.

link.springer.com/article/10.1007/s00034-024-02722-1

Home > Circuits, Systems, and Signal Processing > Article

Detecting and Classifying Parametric Faults in Analog Circuits Using an Optimized Attention Neural Networks

Published: 25 May 2024 (2024) [Cite this article](#)

S. P. Karthi & K. Kavitha

22 Accesses [Explore all metrics](#)

Abstract

In analog circuits, the essential variability in component parameters and the various distribution of fault component parameters present challenges like unpredicted faults, inconsistent data and high computational complexity for effective classification diagnosis. To address these issues, this research introduces an Optimized Attention Neural Networks, integrating three machine learning classifiers: Pyramidal convolution split Attention Neural Networks, Graph Visual Attention Neural Networks and Capsule Shuffle Attention Neural Networks. Initially, the approach incorporates fuzzy rough mutual information, spatial distribution principal component analysis and enhanced minimum redundancy maximum relevance techniques to select crucial features for distinguishing and categorizing parametric faults in analog circuits. Subsequently, the proposed classifiers leverage with the enhanced termite alate optimization algorithm for the recognition and categorization of parametric burdens. The experiments are conducted using MATLAB, demonstrate notable outcomes across three filters. The achieved results indicate an average accuracy of 99.92% for the salien-key band-pass filter, 99.88% for the four op-amp biquad high-pass filter and 99.86% for the leap frog filter. Furthermore, these filters exhibit higher precision and recall values when compared to existing approaches.

SKCET



FACULTY PROGRESSION



Follow us
@



#skcetofficial



#skcetofficial



#skcet



#skcetofficial



Feedback@
skcetbuzz@skcet.ac.in

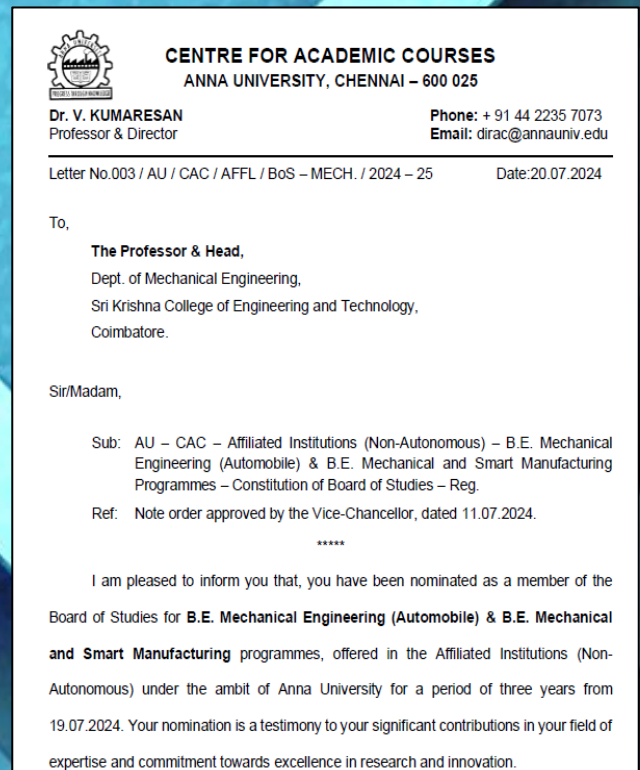
CSE | GUESTT LECTURE – GEN AI



Dr.G.Vijaya, Professor ,Computer Science and Engineering has received a letter of appreciation for delivering an expert talk on "**GenAI**" for the faculty development program on "**Artificial Intelligence and Robotics**" conducted by the Department of Artificial Intelligence and Machine learning, Mahaguru Institute of Technology on 15-07-2024.

MECH | BOS MEMBER - ANNA UNIVERSITY

Dr.P.Ashoka Varthanan, Dean, R&D and Innovation, has been nominated as a members of the Board of Studies for B.E. Mechanical Engineering (Automobile) and B.E. Mechanical and Smart Manufacturing programmes, offered in the Affiliated Institutions (Non - Autonomous) under the ambit of Anna University for a period of three years from 19.07.2024.



SKCET



FACULTY CERTIFICATIONS



Follow us
@



#skcetofficial



#skcetofficial



#skcet



#skcetofficial



Feedback@
skcetbuzz@skcet.ac.in

ECE | MATLAB CERTIFICATION



Dr.J.R. Dinesh Kumar,
Assistant Professor, **ECE** has
successfully completed
Mathworks Online course on
“MATLAB Onramp”

M.TECH CSE | IA TRAINING - RESKILLING

Mr.J.Senthil , Assistant Professor,
Department of **M.TECH Computer
Science and Engineering** has
successfully completed Innovation
Ambassador Training Reskilling on
24.7.2024.



M.TECH CSE | WORKSHOP ON VISUAL MACHINE LEARNING

Mr.J.Senthil , Assistant Professor, Department of **M.Tech. Computer Science and Engineering** has successfully participated in one day online Workshop on **“Visual Machine Learning”** conducted by SRM Madurai college of Engineering and Technology on 20.7.2024



SRM MADURAI
COLLEGE FOR ENGINEERING AND TECHNOLOGY
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai



Certificate of Participation

This is to certify that **SENTHIL J** from **Sri Krishna College of Engineering and Technology, Coimbatore** has actively participated in the One Day Online Workshop on **“Visual Machine Learning”** organised by Department of Computer Science and Engineering on **(20.7.24) Saturday** .

Dr. C. Callins Christiyana
Professor and Head-CSE
Co-Convener

Dr. Durairaj
Principal
Convener

MCT | E - YANTRA CERTIFICATION



Mr.T. Vignesh, Assistant Professor, **Mechatronics Engineering**, has successfully completed **eLSI: Basics of Embedded Systems and Robotics**, conducted as a part of MOOC through the e-yantra Lab Setup Initiative (eLSI).

AI&DS | FDP PARTICIPATION



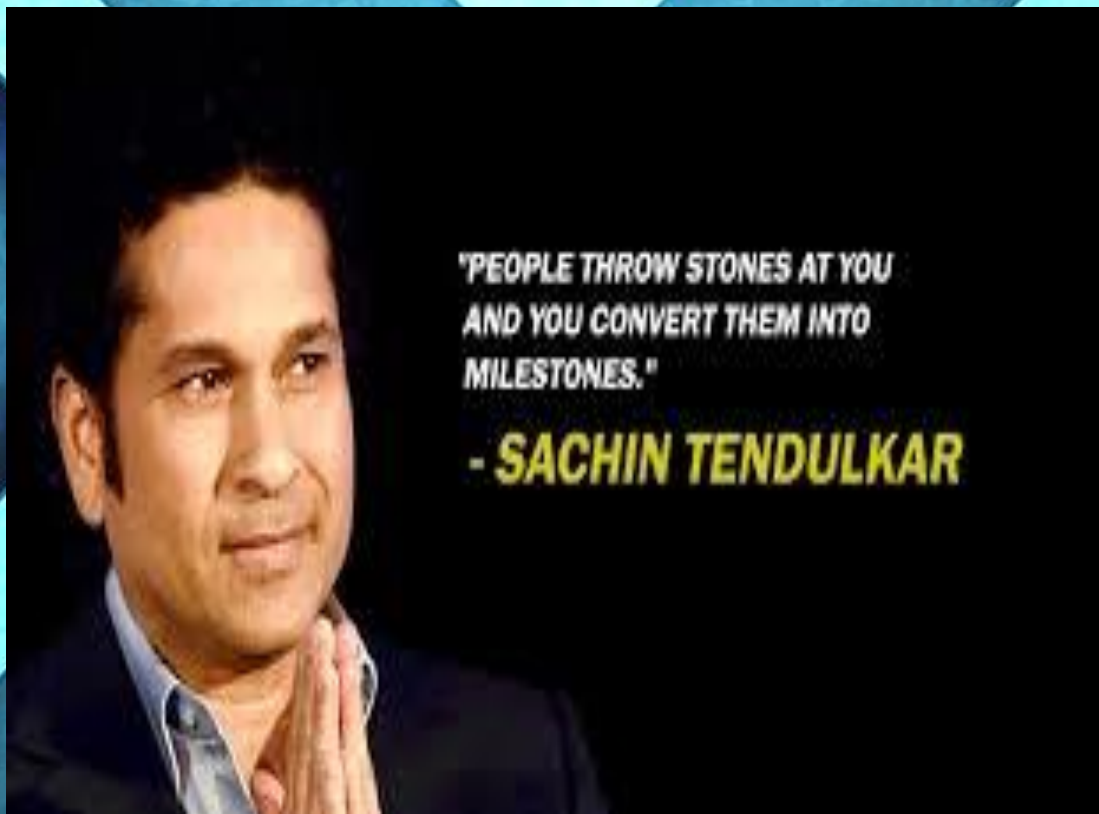
Mr.K.Balaji, Mr.S.Senthil Kumar, Mr.A.Wasim Raja and Mr.G.S.Pugalendhi Assistant Professors, **AI & DS** have participated in the Three days online International Faculty Development Program on **“Futuristic Directions on Energy System, Computing and Communication Engineering”** organized by the Department of Electronics and Communication Engineering, SKCET, Hyderabad from 03-07-2024 to 05-07-2024.

IT | INFOSYS CERTIFICATION



Mr. M.Diwakaran, Assistant Professor, IT has successfully completed a course on "Basics of Python" Certified by Infosys Springboard.

LEGENDARY INSIGHT



SKCET



**ALUMNI
CORNER**



Follow us
@



#skcetofficial



#skcetofficial



#skcet



#skcetofficial



Feedback@
skcetbuzz@skcet.ac.in

AI&DS | ALUMNI INTERACTION



Ms. Prabitha P, prominent alumna from the Department of **Artificial Intelligence and Data Science (2020-2024 batch)**, currently working as **Data Informatics Analyst – ServiceNow – Hyderabad** addressed the Third year AI&DS students on 25.07.24 on the current Job Opportunities in IT.

Session Takeaways:

- Programming skills in IT
- Selection of Language based courses
- Student improvement towards IT industry
- Importance of Communication skill

SKCET

Buzz



**CREATIVE
CORNER**



Follow us

@



#skcetofficial



#skcetofficial



#skcet



#skcetofficial



Feedback@
skcetbuzz@skcet.ac.in

M.TECH CSE | CREATIVE CORNER



Colorful Conversations on the Wall:

Nestled against a vibrant backdrop, these two parakeets bring a splash of life to the old brick wall. Their vivid green feathers contrast beautifully with the rustic reds and whites, creating a scene that's both picturesque and lively. These feathered friends seem to be deep in conversation, perhaps discussing the day's adventures or planning their next flight. In the quiet of the afternoon, they remind us of the beauty in nature's simplest interactions, where every nook and cranny holds a story waiting to be told.

**CAPTURED BY
INDHU BHASHINI V**

ALUMNI - Dept of M.TECH CSE BATCH (2019-2024)

ECE | KARGIL VIJAY DIWAS - 26.07.2024



“Honouring Our Heroes on Kargil Vijay Diwas”

On July 26, India observes Kargil Vijay Diwas, a day of remembrance and pride for the valour and sacrifice of our armed forces during the Kargil War in 1999. This day commemorates the success of Operation Vijay and the heroic efforts of Indian soldiers who reclaimed the peaks of Kargil from intruders.

The Kargil conflict, fought in the treacherous terrain of the Himalayas, tested the strength, resilience, and determination of our soldiers. Despite facing harsh conditions and a formidable enemy, they displayed unparalleled bravery and strategic acumen. The victory in Kargil stands as a testament to their unwavering dedication to the nation. Kargil Vijay Diwas is not just a day to honour the fallen but also to acknowledge the ongoing commitment of our armed forces. It's a time for the nation to come together in solidarity and express gratitude to those who defend our borders.

- RITHANYAA D S

III ECE C

AI&DS | CREATIVE CORNER



SANDHYA V
II AI & DS "B"

IT | CREATIVE CORNER



Ms.R. Janani
Assistant Professor-IT

IT | CREATIVE CORNER



Ms.R. Janani
Assistant Professor-IT

