

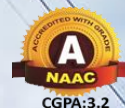


KALLAM HARAMADHAREDDY INSTITUTE OF TECHNOLOGY

Affiliated to JNTU Kakinada, accredited by NBA, Accredited by NAAC
with A Grade

CHOWDAVARAM (POST), GUNTUR, ANDHRA PRADESH-522019

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EEE-AMPACITY QUATERLY- NEWSLETTER

APRIL 2K24-JUNE 2K24

Department of Electrical and
Electronics Engineering

INSIDE THIS ISSUE:

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About College:

Founder promoter members of the Society, who are Primarily Businessmen, Believe that the future of India can be built and moulded in class rooms; the total education can play a very important role for peaceful and co-operative existence of all human beings. The National and International understanding can be Built-up only through the Tool of Education, thereby after careful and meaningful discussions among ourselves, We desired to establish a society by the name " **KALLAM ACADEMY OF EDUCATIONAL SOCIETY** ". The Society is registered as vide **Reg. No. 24 of 2006 dated 17-01-2006** under the **Andhra Pradesh Societies Registration Act, 35 of 2001**.

Science and Technology have emerged major factors in the sustenance of the society. They are changing the world with a matchless speed and magnitude. In this scenario , to create competent technocrats, an ideal institution with good ambience, infrastructure and eminent faculty is required.



Department Vision:

To produce globally competent man power which can contribute to the development and welfare of the society by meeting the needs of both the nation and the international community to empower the students to become technologically vibrant , innovative and emotionally matured and to train them to face the challenges of the quality conscious globalized world economy

Department Mission:

- To create educational opportunities to the predominantly agrarian society in and around guntur
- To provide an environment most conducive to learning and to create a stimulating intellectual atmosphere on campus
- To achieve academic excellence
- To support economically weak students to pursue education
- To establish partnership between institution and industry

Editorial Board:

Chief Editor:

Dr. K. Hari Krishna, Professor, HOD, EEE

Editors:

Dr. G. Kishor Babu, Professor, EEE

Dr. P.P. Sharma,
Professor, EEE

Faculty Members:

Mr. M. V. N. Murthy,

Asst. Prof., EEE,

Mr. J. Sunil Babu,
Asst. Prof., EEE.

Student Members:

SK. Khadar Basha (IV-EEE),

Koppolu Mahesh (III-EEE).

Gaddam Shankari (II EEE)

Student Achievements:

S. No.	Regd. No.	Name of The Student	Name of The Event	Event dates	Name of the Organizing Inst.	Merit/Participation	State – within/ outside
1	208X1A0202	Bathula Sri Manikanta	Paper Presentation	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	Participation	State – within
2	208X1A0209	Chirra Mounika	Paper Presentation	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	2 nd Prize	State – within
3	208X1A0211	Gajula Srilakshmi	Paper Presentation	Aagama2024, 16 Th March 2024	MIC College of Technology	Participation	State – within
4	208X1A0228	Onteddu Hari Priya	Paper Presentation	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	Participation	State – within
5	208X1A0236	Shaik Sameer Basha	Paper Presentation	Aagama2024, 16 Th March 2024	MIC College of Technology	1 st Prize	State – within
6	218X5A0202	Jinkala Pavan Kalyan	Paper Presentation	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	2 nd Prize	State – within
7	218X5A0209	Sesham Uma Maheswara Rao	Paper Presentation	Aagama2024, 16 Th March 2024	MIC College of Technology	Participation	State – within
8	218X1A0205	Gopu Trinadh	Paper Presentation	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	Participation	State – within
9	218X1A0209	Kalisetty Prem Chand	Technical Quiz	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	Participation	State – within
10	218X1A0215	Parimi Sudhakar	Paper Presentation	Aagama2024, 16 Th March 2024	MIC College of Technology	Participation	State – within
11	218X1A0223	Veerisetty Thilak Kumar	Technical Quiz	Explorers Meet-2k24, 6	SRK Institute of Technology	3 rd Prize	State – within

				& 7 March 2024			
12	228X5A0207	Gollapalli Uma Manikanta	Paper Present ation	Aagama2024, 16 Th March 2024	MIC College of Technology	1 st Prize	State – within
13	228X5A0211	Kakumanu Pradeep Kumar	Technic al Quiz	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	Particip ation	State – within
14	228X5A0217	Marella Rohit	Technic al Quiz	Aagama2024, 16 Th March 2024	MIC College of Technology	Particip ation	State – within
15	228X5A0227	Saikam Yaswanth Varma	Technic al Quiz	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	Particip ation	State – within
16	228X5A0231	Vankayalpati Bala Raju	Technic al Quiz	Aagama2024, 16 Th March 2024	MIC College of Technology	3 rd Prize	State – within
17	228X1A0205	Andugulapati Prasanna	Paper Present ation	Aagama2024, 16 Th March 2024	MIC College of Technology	Particip ation	State – within
18	228X1A0210	Dudekula Roshan Basha	Technic al Quiz	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	3 rd Prize	State – within
19	228X1A0224	Vadithe Nagaraju Naik	Paper Present ation	Aagama2024, 16 Th March 2024	MIC College of Technology	Particip ation	State – within
20	238X5A0201	Aratipamula Venkata Srinivasarao	Technic al Quiz	Aagama2024, 16 Th March 2024	MIC College of Technology	Particip ation	State – within
21	238X5A0209	Paramkusam Vijay Karthik	Technic al Quiz	Aagama2024, 16 Th March 2024	MIC College of Technology	3 rd Prize	State – within
22	238X5A0222	Sidde Lakshmi Venkata Bhupal	Technic al Quiz	Aagama2024, 16 Th March 2024	MIC College of Technology	Particip ation	State – within
23	238X5A0224	Danaboina Devanand Raju	Paper Present ation	Aagama2024, 16 Th March 2024	MIC College of Technology	Particip ation	State – within

Faculty Achievements:

- List of Publications:**

S. No	Name of the author	Title of the Paper	Name of the Journal	Month & Year of Publications	ISSN /DOI Number	Remarks
1	Dr. K. Hari Krishna	Transformer-less ANN-Controlled STATCOM-based Power quality improvement for three phase DC-AC Boost inverter in grid-connected solar photovoltaic Systems	International Journal of Electrical and Electronics Engineering	NOV 2023	ISSN: 2348-8379	SCOUPS
2	Dr. K. Hari Krishna	An intelligent based DC series electric springs in DC micro grids	International Journal of Intelligent Systems and Applications in Engineering	JAN 2024	ISSN: 2147-6799	SCOUPS
3	Dr. L. Shanmukha Rao	Analysis of a novel soft switching bidirectional DC-DC Converter for electric vehicle	International Journal of Applied Power Engineering	OCT 2023	ISSN: 2302-9285	SCOUPS
4	Dr. L. Shanmukha Rao	Performance evaluation of solar-PV integrated hybrid fuzzy Logic controlled multi-functional UPQC for enhancing PQ features	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS
5	Dr. L. Shanmukha Rao	A novel hybrid-fuzzy logic based UVC technique for Solar-PV/Grid integrated water-pumping system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS
6	Dr. L. Shanmukha Rao	Performance evaluation of novel 9-level RSMLI topology for Grid-tied solar-PV system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS

7	Dr. L. Shanmukha Rao	A novel solar PV integrated fuzzy-logic controlled UAPQC Device for power quality enhancement	International Journal of Advances in Applied Sciences	MARCH 2024	ISSN: 2252-8814	SCOU P S
8	Dr. L. Shanmukha Rao	A novel fuzzy-logic controller - MDSUPQC topology for power quality improvement in multi-feeder distribution system	International Journal of Advances in Applied Sciences	MARCH 2024	ISSN: 2252-8814	SCOU P S
9	Dr. L. Shanmukha Rao	A novel 7-level reduced-switch MLI topology fed PMSM drive for electric vehicle system	Indonesian Journal of Electrical Engineering and Computer Science	FEB 2024	ISSN: 2502-4752	SCOU P S
10	Dr. L. Shanmukha Rao	A novel SIMIDCBC topology driven PMSM for PEV application	International Journal of Applied Power Engineering	MARCH 2024	ISSN: 2252-8792	SCOU P S
11	Dr. L. Shanmukha Rao	Mitigation of PQ issues in EV charging station connected distribution system using novel RSMLI - based shunt APF	International Journal of Advances in Applied Sciences	DEC 2023	ISSN: 2252-8814	SCOU P S
12	Dr. G. Kishor Babu	Analysis of a bi-directional power Converter of electric vehicle	Journal of systems engineering and electronics	DEC 2023	ISSN: 1671-1793	SCI
13	Dr. P. P. Sharma	A novel fuzzy-logic controller-MDSUPQC topology for power quality improvement in multi-feeder distribution system	International Journal of Advances in Applied Sciences	MARCH 2024	ISSN: 2252-8814	SCOU P S
14	Dr. P. P. Sharma	A novel solar PV integrated fuzzy-logic controlled UAPQC device for power quality enhancement	International Journal of Advances in Applied Sciences	MARCH 2024	ISSN: 2252-8814	SCOU P S

15	Dr. P. P. Sharma	Performance evaluation of novel 9-level RSMLI topology for Grid-tied solar-PV system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUP S
16	Dr. P. P. Sharma	A novel hybrid-fuzzy logic based UVC technique for Solar-PV/grid integrated water-pumping system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUP S
17	Dr. P. P. Sharma	Performance evaluation of solar-PV, integrated hybrid fuzzy Logic controlled multi-functional UPQC for enhancing PQ features	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUP S
18	Mr. M. V. N. Murthy	Performance evaluation of solar-PV integrated hybrid fuzzy Logic controlled multi-functional UPQC for enhancing PQ features	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUP S
19	Mr. M. V. N. Murthy	Mitigation of PQ issues in EV charging station connected Distribution system using novel RSMLI-based shunt APF	International Journal of Advances in Applied Sciences	DEC 2023	ISSN: 2252-8814	SCOUP S
20	Mr.M. Ranjith Kumar	Mitigation of PQ issues in EV charging station connected Distribution system using novel RSMLI-based shunt APF	International Journal of Advances in Applied Sciences	DEC 2023	ISSN: 2252-8814	SCOUP S
21	Mr. M. Ranjith Kumar	A novel hybrid-fuzzy logic based UVC technique for Solar-PV/grid integrated water-pumping system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUP S

• **List of FDP's:**

S.No	Name of the Faculty	FDP / Workshop /Seminar /STTP	Title of the Program	Date(s)		Organization
				From	To	

1	Dr. K. Hari Krishna	FDP	AI Techniques in electrical system	15/04/2024	20/04/2024	Bapatla Engineering College
2	Dr. K. Hari Krishna	STTP	Electrical CAD Design	26/06/2023	01/07/2023	Bapatla Engineering College
3	Dr. L. Shanmukhara o	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
4	Dr. G. Kishor babu	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
5	Dr. G. Kishor babu	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
6	Dr.P.P. Sharma	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
7	Mr. R. Subbareddy	STTP	Electrical CAD Design	26/06/2023	01/07/2023	Bapatla Engineering College
8	Mr. M.V.N.Murthy	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
9	Mr.V. Rajesh	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
10	Mr.P. Venubabu	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet

						Engineering College
11	Mr.M. Ranjith Kumar	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
12	Mrs. P. Kavitha	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
13	Mr.J. Sunil babu	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
14	Mrs. P. Naga divya	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
15	Mr. D. Sambhasiva Rao	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
16	Mrs. P. Nagajyothi	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
17	Dr. M. S. Naik	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
18	Mr. K. Gopi Krishna	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College

➤ **Student workshops and guest lecturers:**

S. No	Name of the Event Organized	Event Type	Date	Resource Person with Affiliation
1	A Three Day Workshop-2024 “PCB Design”in association with APSSDC	Workshop	23.01.2024 to 25.01.2024	Mr. B. Mahidhar, Trainer, APSSDC, Vijayawada, Andhra Pradesh
2	A Three Day Workshop-2024 “PCB Design”in association with APSSDC	Workshop	08.01.2024 to 10.01.2024	Mr. B. Mahidhar, Trainer, APSSDC, Vijayawada, Andhra Pradesh
3	"The Career Shift: Preparing for Corporate Excellence"	Awareness Session	03-02-2024	Abhishek Doijode, Campus Hiring, University relations, Virtusa
4	“Shaping Your Future in Cloud Technology”	Career Talk	10-02-2024	Shubam Nigam, Associate Principal Engineer, Nagarro
5	"Unlocking Potential: Transitioning Smoothly to the Corporate Sphere"	Awareness Session	15-02-2024	N. Vasishta, Data Engineer, Hexaware Private Ltd
6	“ Career in Technical Writing”	Career Talk	24-02-2024	Siddarth Aggarwal, Head of Information Development, NEWGEN
7	“Empowering Women in Tech: Inside AWS Data Centers in India”	Webinar	03-04-2024	Amazon Web Services
8	“Career in Cloud Technologies”	Webinar	27-04-2024	Samir Pradhan, Senior Technical Architect, VIAPLUS
9	“Future Proof Your Engineering Career with AI and Generative AI”	Career Talk	15-05-2024	Kiran Chandaka, Vice President, State Street
10	“Careers in Data Analytics Process Automation”	Career Talk	16-05-2024	Dhaval Doshi, Assistant Vice President, JP Morgan Chase&Co

11	“Career Opportunities in Robotics Process Automation”	Career Talk	31-05-2024	Pramit Mall, Senior Technology Specialist, Tesco
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➤ **Tech news:**

Major Stories Apr-Jun 2024

Global / Model / Product / Policy Moves

1. OpenAI releases GPT-4o

In May 2024, OpenAI launched *GPT-4o*, a multimodal version capable of processing/generating text, voice, and image inputs. This marked a big step toward more interactive, multimodal AI. Wikipedia

2. Microsoft working on its own large AI model

Also in May, Microsoft was reported to be developing a large in-house language model aimed at competing with offerings from Google and OpenAI. Reuters

3. Baidu upgrades Ernie to 4.0 Turbo

In June, Baidu launched *Ernie 4.0 Turbo*, updating its Ernie model. By that time it had amassed about 300 million users; Baidu also strengthened its developer ecosystem via its Qianfan platform. Reuters

4. India’s plan for a bespoke foundational AI model

In May, the Indian government announced plans ($\approx$ ₹2,000 crore) to develop a foundational AI model tailored for Indian companies, researchers, academics, with support for multiple Indian languages. This will likely be part of the IndiaAI Mission. Carnegie Endowment

5. EU AI Act finalized

The European Union’s landmark *Artificial Intelligence Act* was given final approval in May 2024. This established a risk-based regulatory framework for AI across EU member states, with stricter oversight for “higher risk” uses. Carnegie Endowment

6. Startup funding trends in India

- For the first half of 2024 (Jan-June), Indian tech startups raised about USD 4.1 billion, a $\sim$ 4% increase over the previous half (H2 2023). The Economic Times+1
- In the Q2 (April-June) quarter in particular, Indian startup funding rose year-on-year by $\sim$ 45%, to about USD 3.2 billion. The Times of India

7. Other regulatory / policy initiatives in the US

In April 2024, U.S. tech policy saw movement on several fronts: proposals / bills regarding TikTok’s

ownership, new legislation around children's online privacy and safety, net neutrality was reinstated in certain regulatory versions, reauthorization of surveillance laws etc. Tech Policy Press

8. Multilingual / Open models

There was work on models that support multiple languages. For example, the India initiative mentioned above, and also research milestones like Aya 23 (a family of multilingual models covering 23 languages) with open weights being released. arXiv

India-Specific Highlights

- IndiaAI Mission comes into play^{**}: Post its approval in March, the ground started being laid for many of its components—compute infrastructure, data sets, foundation model support etc. Carnegie Endowment⁺¹
- Startup funding stabilization: After a period of decline, Indian startups saw signs of recovery or stabilization in funding in Q2 2024 (April-June). CXOToday.com⁺²The Times of India⁺²
- Sector performance: The sectors which did well in that period included Retail, Enterprise Applications, while FinTech saw some declines vs earlier periods (though still a major component). CXOToday.com

Trends & Implications

- AI is moving more strongly into multimodal abilities (voice, image, text together), not just text.
- Governments are catching up: regulation (EU AI Act, IndiaAI Mission), policy shifts, investment in local models and infrastructure.
- After funding dips (due to global macro / rate environment), some markets (like India) are showing stabilization or moderate recovery. Late-stage funding is helping.
- Rising importance of native / regional language support in AI models, especially in populous multi-lingual countries like India.
- The competition among tech giants (Microsoft, OpenAI, Baidu, Google) continues, with new model releases, ecosystem growth, developer access etc.