



VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

An Autonomous Institute, ISO9001:2015 & QS I-Gauge Diamond Rated Institute, Accredited by NAAC with 'A++' Grade

NBA Accreditation for B.Tech CE, EEE, ME, ECE, CSE, EIE, IT, AE Programmes

Approved By AICTE New Delhi, Affiliated to JNTUH, Hyderabad.

Recognized as "College with Potential for Excellence" by UGC

Volume: 2

Issue: I



ELECTROCOMM-IN-VISION

Department of Electronics and Communication Engineering

Quarterly News Bulletin

October - December 2022

Vision

A resource centre of academic excellence for imparting technical education with high pattern of discipline through dedicated staff which shall set global standards, making National and International students technologically superior and ethically strong, who in turn shall improve the quality of life.

Mission

- To provide quality education in the domain of Electronics and Communication Engineering through effective learner centric process.
- To provide industry specific best of breed laboratory facilities beyond curriculum to promote diverse collaborative research for meeting the changing industrial and societal needs.

Quality Policy

- Impart up-to-date knowledge in the students' chosen fields to make them quality engineers.
- Make the students experience the applications on quality equipment and tools.
- Provide quality environment and services to all stakeholders.
- Provide systems, resources and opportunities for continuous improvement.
- Maintain global standards in education, training and services.

S.No.	Contents	Page No.
1	Foreword	1
2	Department Updates	2
3.	Awards & Recognitions	2-4
4.	Guest Lectures Delivered	4
5	Events Organized	4-5
6	Events Attended	6-8
7	Online Certifications	8-9
8	Training, Internships and Placements	10-11
9	Professional Society Activities	11
10	Ph.D Admitted	11
11	Research and Development Activities	12-15
12	Industrial Visits	16-17
13	Upcoming Events	18
14	Tech News	19
15	Articles by Faculty and Students	20
16	Creative Corner	21-23
17	To solve or not to?	24

Head of the Department



I cordially invite you to our Oct-Dec, 2022 edition of our department, Electronics and Communication Engineering's newsletter. We always strive to improve ourselves everyday and the proof of it is our achievement records of our talented and passionate students and faculty. Enclosed in these pages are the above mentioned achievements which makes me very proud.

Our faculty has actively participated and contributed to international conferences of IEEE while our students have showed their remarkable skills in various challenges and hackathons. Our department is not only focused on academics but also extra-curricular activities like sports, making our students all-rounders.

We provide our faculty and students with informative events and guest lectures to make sure that we stay updated with the trends in our industry as well as encourage them to extend their learning beyond classroom teachings and college curriculum, so that they can think out side the box. As always, we make sure that we bring only the best to our students and faculty.

Dr. S. Rajendra Prasad

Department Updates

- VNR Vignana Jyothi Institute of Engineering and Technology organized an International Conference on recent trends in Microelectronics, Automation, Computing & Communications Systems (**ICMACC-22**) in association with IEEE Hyderabad Section from 28th to 30th December 2022. The **organizing commitee** includes Department of ECE.

Awards & Recognitions

- **Mr. Ch. Anil Kumar**, Assistant Professor served as **Reviewer** for IEEE International Conference on IEEE International Symposium on Smart Electronic Systems (**IEEE-ISES-2022**), NIT Warangal on 22nd & 23rd November 2022.
- **Dr. Y. Padma Sai**, Professor and Student Dean Progression acted as **General Chair** for IEEE International Conference on Recent Trends in Microelectronics, Automation, Computing and Communication Systems (**ICMACC-2022**), Department of ECE, VNR Vignana Jyothi Institute of Engineering and Technology from 28th to 30th December 2022.
- **Dr. S. Rajendra Prasad**, Professor and Head, **Dr. P. Kishore**, Associate Professor acted as **Technical Chair** for the IEEE International Conference on Recent Trends in Microelectronics, Automation, Computing and Communication Systems (**ICMACC-2022**), Department of ECE, VNR Vignana Jyothi Institute of Engineering and Technology from 28th to 30th December 2022.
- **Dr. Y. Chalapathi Rao**, Associate Professor, **J. L. V. Ramana Kumari**, Assistant Professor, **D. Kanthi Sudha**, Assistant Professor, **Ms. Ch. Raja Kumari**, Assistant Professor **Dr. D. Santosh Kumar**, Assistant Professor, **Mr. E.Vijay Babu**, Assistant Professor served as **Reviewer** for IEEE International Conference on Recent Trends in Microelectronics, Automation, Computing and Communication Systems-2022 (**ICMACC-2022**), Department of ECE, VNR Vignana Jyothi Institute of Engineering and Technology from 28th to 30th December 2022.



Success is peace of mind, which is a direct result of self-satisfaction in knowing you made the effort to become the best of which you are capable.
—John Wooden



- **Dr. G.Shanthi**, Assistant Professor, **Mr. V. Naveen Kumar**, Assitant Pofessor, **Ms. Ch. Raja Kumari**, Assistant Professor appointed as a **Member of Registration Committee** for IEEE International Conference on Recent Trends in Microelectronics, Automation, Computing and Communication Systems (**ICMACC-2022**), Department of ECE, VNR Vignana Jyothi Institute of Engineering and Technology from 28th to 30th December 2022.
- **Dr. Santosh Kumar**, Assistant Professor acted as a **Member of the Design, Media and Publicity Committee** for IEEE International Conference on Recent Trends in Microelectronics, Automation, Computing and Communication Systems (**ICMACC-2022**), Department of ECE, VNR Vignana Jyothi Institute of Engineering and Technology from 28th to 30th December 2022.
- **Dr. Ranjan Kumar**, Professor appointed as an **Editor for Journal of Engineering Design and Computational Science**.
- **K. Pradhyuth Mohan** (2007IA04E3), **A. Srujan** (2007IA04C1), **M. Karthik** (2007IA04F5), and **S. Sreyas** (2007IA04G7) secured an **Outstanding award** for their performance in the "**Space Apps Challenge**" conducted by Space Apps Challenge on 1st and 2nd October 2022.
- **B. Deepak** (21075A0407), **D. Dhanush** (21075A0414), **Y. Anish** (2007IA0404), and **V. Tarun** (21075A0406) secured **2nd Place** in the hackathon "**IoT Sprint-2k22**" conducted by VNR Vignana Jyothi Institute of Engineering and Technology on 04th and 05th November 2022.
- **N. Surendranath** (2007IA0495) secured **3rd Place** in the hackathon "**IOT Sprint-2k22**" conducted by VNR Vignana Jyothi Institute of Engineering and Technology on 4th and 5th November 2022.
- **M. Pranav Reddy** (2107IA04A6) secured **3rd Place** in the hackathon "**IOT Sprint-2k22**" conducted by VNR Vignana Jyothi Institute of Engineering and Technology on 4th and 5th November 2022.
- **G. Jeevana Sai** (2007IA0476), **T. Lohita** (2007IA4H3), and **K. Bhuvana** (2007IA0429) secured an **Outstanding award** for their contributions in the "**Machine Learning Workshop**" conducted by ISTE at VNR Vignana Jyothi Institute of Engineering and Technology on 06th and 13th November 2022.
- **Phanindra** (2107IA0477) secured an **Outstanding award** for his contributions in the "**Machine Learning Workshop**" conducted by VNR Vignana Jyothi Institute of Engineering and Technology on 6th and 13th November 2022.

The pessimist sees difficulty in every opportunity. The optimist sees opportunity in every difficulty.

—Winston Churchill

- **Supriya** (2207IA0411) was rewarded with a **badge for her participation** in "**Hacktoberfest-2022**" conducted by Hacktoberfest-2022 on 6th November 2022.
- **E. Samsritha** (2007IA0418) was part of the VNRVJIET Basketball team that secured **1st place** in **Xth National Level Inter- Engineering Sports Meet for Women-Verve 22** held on 25th & 26th November 2022 at GNITS, Hyderabad
- **E. Samsritha** (2007IA0418) was part of the VNRVJIET Basketball team that secured **1st place** in **Inter- Engineering Sports Meet Ashwadhama** held on 21st, 22nd & 23rd November 2022 at Sreenidhi Engineering College , Hyderabad.
- **Ch. Abhilash** (2007IA04K1) secured **third position** in **200m Butterfly**, **third position** in **100m Butterfly**, **fifth position** in **200m Freestyle** & **400m Individual Medley** in **SFI Open National Ranking Championship-2022** (Zonal Qualifier event) held at Chennai on 3rd & 4th December 2022.

Guest Lectures Delivered

- **Dr. R. Sravanth Kumar**, Assistant Professor, served as **Session Chair** and one of the **speakers** in **GHMPHCI - 2022** on the topic "**Human Behaviour Monitoring through BCI for Healthcare applications**" organized by IIIT Ranchi AICTE-ATAL on 26th November 2022.
- **Mr. D. Ramesh**, Assistant Professor, delivered a **Lecture** in a Workshop on the IoT Lab Installation program on the topic "**Internet of Things**" organized by Bheema Institute of Technology Science, Andhra Pradesh, on 21st October 2022.
- **Dr. R. Sravanth Kumar**, Assistant Professor, acts as one of the Keynote Speaker in the Online Faculty Development Programme (**FDP**) on "Data Analytics in Mental Healthcare (**DAMH-2022**)" organized by the Indian Institute of Technology, Ranchi, Sponsored by AICTE & ATAL from 12th to 23rd December 2022.
- **Mr. D. Ramesh**, Assistant Professor, guided a team of students for a project titled "**Automated Weather Station**" organized by the Department of Civil Engineering, VNRVJIET, from 16th to 18th December 2022.
- **Dr. Y. Padma Sai**, Professor & Dean of Students Progression, acted as a **speaker** in **WiEC 2022**, organized by KG Reddy College of Engineering & Technology, Hyderabad, on 19th December 2022.



Lecture delivered by
Mr. D. Ramesh

Events Organized

- **Webinar** on "**Re-onboarding session to all the Faculty on MATLAB Campus-wide Suite benefits**" was conducted on 28th October 2022.
- 2-day **Hackathon "IOT Sprint-2k22"** was organized on 04th and 05th November 2022.

If you are working on something that you really care about, you don't have to be pushed. The vision pulls you.

—Steve Jobs

- **Guest lecture** on “**How To Crack GATE 2023 – 2 Months strategy**” by **Dr. R. Murali Prasad**, Professor, Dept. of ECE, IARE was conducted on 15th November 2022 for III B.Tech. ECE students.



Guest lecture by Dr. R. Murali Prasad



Guest Lecture by Mr. Ankit Raj Mathur



Interactive Session by Ms. Sailaja

- **Guest Lecture** on “**Career opportunities in Aerospace Industries**” by **Mr. M. Ankit Raj**, Engineering Development Group Manager, MathWorks was conducted on 19th November 2022 for B.Tech. students.
- **Webinar** on “**Student Orientation on MATLAB**” for the students of B. Tech, M. Tech, and PhD of all branches on 28th November 2022.
- **Interactive Session** on “**How Bhagavadgeetha related to our education system**” by **Smt. Sailaja** on 29th November 2022 for I B.Tech. Students.
- **Guest Lecture** on “**Introduction to VLSI Industries and career guidance**” by **Mr. Y. Avinash** on 03rd December 2022 for M.Tech. students.



Guest Lecture by Dr. J. Chattopadhyaya

- **Workshop** on “**PCB Design and Application Development**” by **Dr. R. Vikas**, Managing Director, Technotran Electronic Solutions, Nellore from 19th to 22nd December 2022 for II B.Tech. students.
- **Guest Lecture** on “**Overview of Defense Research and Technologies**” by **Dr. J. Chattopadhyaya**, Former Director DRDO and Adjunct Professor in ECE, VNRVJIET on 22nd December 2022 for II B.Tech. students .

- An **Interaction session** on “**Project proposals and collaboration with R & D labs**” was conducted by **Dr. J. Chattopadhyaya**, Former Director DRDO and Adjunct Professor in ECE, VNRVJIET with Embedded Systems & IoT Special Interest Group Faculty on 22nd December 2022.



Interaction with Dr. J. Chattopadhyaya



Parent meeting for II B.Tech. students



- **Parent meeting** was conducted to discuss the performance of students with their parents for II B.Tech. students on 23rd December 2022.

Events Attended

- **Ms. K. Manasa**, Assistant Professor, **Ms. M. Bhagya Lakshmi**, Assistant Professor, **Ms. A. Pravalika**, Assistant Professor & **Mr. Ch. Anil Kumar**, Assistant Professor, attended the Seminar on “**Paradigm Shift in Higher Educational Institutions, Expectations, Opportunities and Challenges**” organized by VNRVJIET on 01st October 2022.
- **Dr. K. B. Archana**, Senior Assistant Professor & **Mr. A. Ramesh Kumar**, Assistant Professor visited CR Rao Institute on 07th October 2022.
- **Dr. A. Sai Kumar**, Assistant Professor, **Mr. T. Srinivas**, Assistant Professor, **Mr. E. Vijaya Babu**, Assistant Professor, **Mr. Ch. Anil Kumar**, Assistant Professor, **Ms. N. Neelima**, Assistant Professor, **Ms. M. Bhagya Lakshmi**, Assistant Professor & **Ms. A. Pravalika**, Assistant Professor attended “**Induction Programme**” organized by Department of Humanities and Sciences, VNRVJIET from 11th to 13th October 2022.
- **Dr. G. Shanthi**, Assistant Professor, **Mr. V. Naveen Kumar**, Assistant Professor, **Dr. D. Santhosh Kumar**, Assistant Professor, **Dr. Pradeep Kumar**, Assistant Professor, **Mr. Ch. Anil Kumar**, Assistant Professor, **Ms. M. Bhagya Lakshmi**, Assistant Professor & **Ms. A. Pravalika**, Assistant Professor attended **Online Workshop** on “**Intellectual Property Rights (IPR) & Patents and Design Filing**” conducted by VNRVJIET in association with RGNIPM Government of India, Nagpur (Under National Intellectual Property Awareness Mission) on 19th October 2022.
- **Dr. A. Sai Kumar**, Assistant Professor, **Mr. T. Srinivas**, Assistant Professor, **Mr. E. Vijaya Babu**, Assistant Professor, **Mr. Ch. Anil Kumar**, Assistant Professor, **Ms. N. Neelima**, Assistant Professor, **Ms. M. Bhagya Lakshmi**, Assistant Professor & **Ms. A. Pravalika**, Assistant Professor attended “**Induction Programme**” organized by Department of Humanities and Sciences, VNRVJIET on 26th October 2022.
- **Dr. S. Rajendra Prasad**, Professor & Head, **Dr. Y. Chalapathi Rao**, Associate Professor, **Dr. D. Santosh Kumar**, Assistant Professor, and **Mr. P. Srinivasa Rao**, Assistant Professor visited the National Institute of Amateur Radio (**NIAR**) on 09th November 2022.
- **Dr. S. Rajendra Prasad**, Professor & Head, **Dr. Y. Chalapathi Rao**, Associate Professor, **Dr. D. Santosh Kumar**, Assistant Professor, **Mr. P. Srinivasa Rao**, Assistant Professor & **Dr. K. Kalyana Srinivas**, Assistant Professor visited DHRUVA SPACE on 16th November 2022.
- **Dr. Y. Padma Sai**, Professor attended IEEE Hyderabad Section Women in Engineering AG, Fourth Flagship **Lalitha Memorial Lecture-Online** and 25 Years of WIE at Hotel, The Plaza, Hyderabad on 16th December, 2022.
- **Ms. D. Kanthi Sudha**, Assistant Professor attended a Webinar on “**Microwave -THz Applications: Strategy for growth in Indian context**” organized by INAE Expert Group on Advanced Microwave – Terahertz-wave Technology & Applications, ISRO-SAC Ahmedabad, DAE-IPR Gandhinagar, CSIR-CEERI, Pilani, BITS-Pilani, Hyderabad campus on 1st December 2022.



Visit to NIAR

- **Dr. V. Krishna Sree**, Associate Professor & **Ms. N. Neelima**, Assistant Professor attended **FDP** on "**AI/ML for computer vision and medical image analysis applications**" conducted by NIT Warangal & BVRIT from 03rd to 11th December 2022.
- **Dr. V. Priyanka**, Assistant Professor attended a two-day **winter school Program** titled "**Sensors for Industry 4.0: Roles, Challenges and Applications**" at IIIT, Hyderabad organized by IEEE Sensors Council Hyderabad Chapter on 20th & 21st December 2022.
- **M.Pranitha** (21071A0418), **K.Nainika** (21071A0420) & **V. Phanitha Sree** (21071A0472) participated in the Career and Leadership Aid Program (**CLAP**) organized by IEEE Region 10 Young Professionals on 01st October 2022 and 02nd October 2022.
- **C. Sai Shanmukh** (20071A0467) has participated in the **online course** on "**Geo-Data sharing and Cybersecurity**," which was conducted from 17th October to 21st October 2022.
- **B.L.S. Lokesh** (21071A0471) has completed "**Microcontroller Embedded C Programming: Absolute Beginners**" on 22nd October 2022.
- **G. Jeevana Sai** (20071A0476), **J. Venkat** (20071A04N3), **K. Nitin** (20071A04N1), **Minhas Begum** (20071A04N8), **B. Srinidhi** (20075A0419), **A. Sainath** (20071A0454), **V. Venkata Srikar** (20071A04Q4) participated in a 3-day **workshop** on "**Deep Learning**" organized by VNR VJIET ACM Student Chapter in collaboration with the Department of Information Technology from 31st October 2022 to 02nd November 2022.
- **K. Srikar** (21071A04PO), **M.Karthik** (21071A0419), **K.Nainika** (21071A0420), **M.Pranitha** (21071A0418), **V.S.N. Sri Samhitha** (21071A0471), **V. Phanitha sree** (21071A0472), **S.Usha Rani** (21071A0445), **B.L.S Lokesh** (21071A0471), **Minhas Begum** (20071A04N8), **G.Yogesh Kumar** (21071A0421), **A.Pavan Dheeraj** (20071A04J2) & **Akula Sainath** (20071A0454) participated in the National Level **VJ Hackathon - Victory & Joy in Smart Innovations** conducted by Department of Computer Science and Engineering, VNR VJIET in collaboration with CSI Student Branch Chapter on 04th & 05th November 2022.
- **B. L. S. Lokesh** (21071A0471) has successfully completed the Remark Skill Technical **Workshop** Program "**Artificial Intelligence with Machine Learning**" at IIT Hyderabad on 05th and 06th November 2022.
- **D. Shashikanth** (20071A04K5) has successfully completed "**VLSI Design Methodologies**" online course on 11th November 2022.
- **Pranav** (21071A04A6) participated in "**MY BIG IDEA HACKATHON**" held on 11th November 2022 at VNR Vignana Jyothi Institute of Engineering and Technology.
- **K. Harika** (20071A04M7) successfully completed the **online non-credit Professional Certificate** "**Google Data Analytics**" on 12th November 2022.
- **G. Srustitha** (20071A04D5) successfully completed the course "**BUILD YOUR OWN STATIC WEBSITE**" on 17th November 2022.
- **S. Sharanya** (22071A04To) participated in Three Day National Level **Workshop** on "**Operation and Trouble Shooting of Refrigeration & Air Conditioning**" organized by the Department of Mechanical Engineering, VNR VJIET, on 18th November 2022.

- **K. Prashanth** (2007IA04N3) has participated in the “**International Conference on Interdisciplinary Perspectives on Memory Studies, Storytelling and Impact of Digital Technologies**”, organized by the Department of Humanities and Sciences, VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, India on 24th and 25th November 2022.
- **S.D. Suchandra** (2007IA04A5) successfully completed the course “**Responsive Web Development with HTML5, CSS3, JavaScript**” on 26th November 2022.
- **B. L. S. Lokesh** (2107IA0471) has successfully participated in the **5G workshop** conducted by IEEE STUDENT BRANCH, BITS PILANI CAMPUS on 27th November 2022.
- **D. Prudhvi Raju** (2007IA0497) completed “**Learn JavaScript- For Beginners**” on 5th December 2022.
- **136 II B.Tech. students** have successfully completed a two-day **workshop** on “**PCB Design and Application Development**” under an **industry-oriented skill development program** conducted by the Department of Electronics and Communication Engineering, VNR VJMET, Hyderabad, from 19th to 20th December 2022.

Online Certifications

Following is the list of faculty who successfully completed NPTEL courses

S.No.	Faculty Name	Course Name
1	Mr. V. Naveen Kumar	Introduction to Machine Learning
2	Mr. Ch. Anil Kumar	Introduction to Cyber Security
3	Mr. Ch. Anil Kumar	Programming in Python

Following is the list of students who successfully completed NPTEL courses

S.No.	Student Name	Roll No.	Name of the Course
1	G. SaiSahith	1907IA0411	Introduction to Machine Learning
2	A.Yamini	1907IA0465	Introduction to Machine Learning
3	A. Vandana	1907IA0466	Introduction to Machine Learning
4	A.Haasita	1907IA0468	Introduction to Machine Learning
5	J.Manav	1907IA0483	Introduction to Machine Learning
6	K. Abhilash	1907IA0488	Introduction to Machine Learning
7	S M. Ismail Sarfaraz	1907IA04A9	Introduction to Machine Learning

8	Shaik Sohail	19071A04B0	Introduction to Machine Learning
9	K. Omkumar	19071A04K8	Hardware Modeling Using Verilog
10	K. Shivani	19071A04M2	Introduction to Machine Learning
11	L. Yashaswi	19071A04M4	Introduction to Machine Learning
12	M. SaiKaivalya	19071A04M6	Introduction to Machine Learning
13	M. Archana	19071A04N0	Introduction to Machine Learning
14	M. Sharath	19071A04N3	Introduction to Machine Learning
15	N. Adarsh	19071A04N4	Introduction to Machine Learning
16	S. Rohan	19071A04P9	Introduction to Machine Learning
17	G. Surya Harshini	19071A04Q4	Introduction to Machine Learning
18	T. SaiTeja	19071A04Q6	Introduction to Machine Learning
19	U. VidyaSivani	19071A04Q7	Introduction to Machine Learning
20	U. Bhargava Sai	19071A04Q8	Introduction to Machine Learning
21	K. Vikas	19071A04R0	Introduction to Machine Learning
22	P. Bhanu Prakash	20075A04I3	Introduction To Internet Of Things
23	P. Pragna	20071A0442	Data Science for Engineers
24	T. Sanjay	20071A0455	Essential Mathematics For Machine Learning
25	A. Ramya	20071A0463	Programming, Data Structures and Algorithm Using Python
26	G. KavyaSree	20071A0474	Python for Data Science
27	M. Shiva Krishna	20071A0491	Essential Mathematics For Machine Learning
28	N. Surendranath Reddy	20071A0495	Programming, Data Structures and Algorithms Using Python
29	S. Ravi Kiran	20071A04B1	Python for Data Science
30	V. JathinSai	20071A04B8	Essential Mathematics For Machine Learning
31	P. Deekshita	20071A04P5	Essential Mathematics For Machine Learning
32	S. Raghu Teja Reddy	20071A04Q1	Essential Mathematics For Machine Learning
33	T. AdithyaPhani	21071A0490	Problem Solving Through Programming In C

One man with courage makes a majority.

— Andrew Jackson

Training, Internships and Placements

Training

- III year and I year B.Tech. students were trained in Concepts of related to GATE, Coding Skills, career opportunities and Examination procedures and processes.

S.No.	Particulars of the event	Beneficiaries
1	GATE Classes on 12th,13th,14th, 26th October 2022 & 01st , 02nd , 03rd,07th,08th,09th,10th,12th,13th,26th & 27th November 2022	III B.Tech. students
2	Training Program on "Coding Skills" on 27th , 28th , 29th October 2022 & 11th , 25th November 2022	III B.Tech. students
3	Career X company organized orientation program on career opportunities in Data Science, Full stack web development and Cloud computing on 24th November 2022	III B.Tech. students
4	Training program on "Basic Coding Skills" on 19th December 2022	I B.Tech. students
5	Awareness session on Examination procedures and processes on 28th December 2022	I B.Tech. students

Internships

S.No.	Roll Number	Name of the Student	Year & Section	Name of the company providing Internship	Duration
1	20071A04H5	V. Kranthi Kumar	III-ECE-3	Unplatforms	01-10-2022 to 30-09-2023
2	19071A0443	V. Rajeev Babu	IV-ECE-1	IIT Hyderabad	07-11-2022 to 07-02-2023

Professional Society Activities

- An Eminent **talk** on “**Engineering Education Innovative Research – New opportunities**” by **Professor Emeritus Dr. Shibhan Koul**, Professor, IIT Delhi and Board of Directors Astra Microwave Products Limited, MTT MGA RIO Coordinator conducted by the VNR VJiet IEEE Student branch in collaboration with MTT-S and **SP IEEE chapters, IETE**.



An Eminent talk by Professor Emeritus Dr. Shibhan Koul

PhD Admitted

- Ms. A. Pravallika, Assistant Professor, received admission to Ph.D. in NIT Warangal on 28th December 2022.

Research and Development Activities

Patent Granted & Published

- **Dr. D. N. Rao, Dr. C. D. Naidu, and Mr. V. Naveen Kumar** received a Patent grant (Patent Application – 5244/CHE/2012, Patent No. 411012) titled “**A wire-less system to reliably control a large network of street lighting systems from a central location through FM broadcast**” on 07th November 2022.
- **Dr. V. Krishna Sree** and team members **published a Patent** (Patent Application – 202241066491) titled “**Healthcare Support Management System using the IOT-Based Blockchain Platform**” on 19th November 2022.
- **Dr. C. D. Naidu**, a Professor, received a Patent grant (Patent Application – 5246/CHE/2012, Patent No. 412679) titled “**An Integrated Computing System and a Process to Generate the Driver Safety Index for Preventing Automobile Accidents**” on 28th November 2022.

Journals/ Conferences/ Book Chapters

S. No.	Faculty name	Title of the paper	Name of the Journal/ Conference
1	Dr. C.D. Naidu Professor & Principal	FPGA Design of Area Efficient and Superfast Motion Estimation Using JAYA Optimization-Based Block Matching Algorithm	Communication, Software and Networks 978-981-19-4990-6, 28th October 2022
2	Dr. S. Rajendra Prasad, Professor & Head	Design and Performance Analysis of Various Leakage Reduction Techniques For SRAM cell	National Conference on Advances in Electrical, Electronics & Computer Engineering , Warangal 27th November 2022
3	Ms. G. Sahitya, Assistant Professor	An Improved Routing Protocol for Heterogeneous Wireless Sensor Networks	International Journal of Engineering Trends and Technology Vol. 70, Issue 10, 79-86, December 2022
4	Ms. G. Sahitya, Assistant Professor	Leaf Disease Detection Using Raspberry Pi	2022 13th International Conference on Computing Communication and Networking Technologies (ICCCNT) 978-1-6654-5262-5 26th December 2022

5	Dr. J L V Ramana Kumari, Assistant Professor	Convolution Merging Technique For Image Encryption Application	International Conference on Micro Electronics, Automation, Computing and Communication Systems (ICMACC), Pg. No.401- 406 From 28th to 30th December 2023
6	Dr. V. Priyanka, Assistant Professor	An Efficient Pulse Detector with Arduino and IR Sensor	2022 13th International Conference on Computing Communication and Networking Technologies (ICCCNT) 978-1-6654-5262-5 26th December 2022
7	Dr. G. Shanthi, Assistant Professor	An Efficient FPGA Implementation of Cascade Integrator Comb Filter	2022 International Conference on Intelligent Innovations in Engineering and Technology 978-1- 6654-5653-1/22/,31.00, 2022 06th December 2022
8	Dr. G. Vijaya Kumar, Assistant Professor	Speech Processed Public Addressing System	Advances in Signal Processing and Communication Engineering 978-981-19-5550-1 02th December 2022
9	Dr. R. Sravanth Kumar, Assistant Professor	Modernized Wildlife Surveillance and Behaviour Detection using a Novel Machine Learning Algorithm	International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321-8169 Vol. 10 ,Issue: 2s December 2022
10	Mr. C. Kaushik, Assistant Professor	Energy Optimization and Optimal Routing Protocol in Wireless Sensor Networks	2022 4th International Conference on Inventive Research in Computing Applications (ICIRCA) 978-1-6654-9707-7 December 2022
11	Ms. K. Aruna Kumari, Assistant Professor	Deep Learning Architechture For Classification Of Breast Cancer Cells In Fluorescence Microscopy Images	International Journal of Advanced Research in Computer Science Vol. 13, No. 6, ISSN No. 0976-5697 November-December 2022
12	Ms. K. Aruna Kumari, Assistant Professor	BRB U-Net: Bottleneck Residual Blocks in U-Net for Light-Weight Semantic Segmentation	International Journal of Computer Applications Vol. 184- No.33, 0975 - 8887 October 2022

A man who has committed a mistake and doesn't correct it is committing
another mistake.

—Confucius Kongzi

13	Ms. K. Aruna Kumari, Assistant Professor	Segmentation of Cell Nuclei in Microscopy Images using Modified ResUNet	2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT) 978-1-6654-6855-8/22 From 07th to 09th October 2022
14	Ms. L. Dharma Teja, Assistant Professor	Design of Low Power 15T SRAM Cell using 20nm technology Based on FinFET, CNTFET and GNR-FET	ZKG International Vol. VII Issue II, ISSN: 2366-1313 November 2022
15	Ms. L. Dharma Teja, Assistant Professor	Performance Analysis of RHBD 14T and 15T SRAM Cells Using Dual Rail Voltage Technique	International Advanced Research Journal in Science , Engineering and Technology Vol. 9, Issue 10, ISSN (O) 2393-8021 October 2022
16	Mr. V. Naveen Kumar, Assistant Professor	Recognition And Analysis of Asthma Disease Based on Cough Sound	JOURNAL OF NORTHEASTERN UNIVERSITY Vol. 25, Issue 04, 2022 ISSN: 1005-3026 16th November 2022
17	Dr. Y. Padma Sai Professor & Dean Students Progression	Respiratory Disease Classification Based on Vowel Sounds	NEUROQUANTOLOGY Vol. 20 , Issue 15 , Pg. No. 3772-3779 01st November 2022
18	Ms. Y. Manasa Assistant Professor	Improved Cooperative Communication In Multi-Hop Wireless Networks With Network Coding	NEUROQUANTOLOGY Vol. 20 , Issue 15 Pg. No. 1193-1200, eISSN 1303-5150 November 2022
19	Ms. V. Alekhya, Assistant Professor	Miniature, State-Of-The-Art Metamaterial Antennas For Wearable Iot Devices, Medical Monitoring, And 5g Networks	NEUROQUANTOLOGY Vol. 20 Issue 15, Pg. No. 1201-1209, eISSN 1303-5150 November 2022
20	Dr. A. Sai Kumar, Assistant Professor	An Efficient Real-Time Embedded Application Mapping for NOC Based Multiprocessor System on Chip	Wireless Personal Communications Vol. 128, Pg. No. 2937-2952, 0929- 6212 12th October 2022
21	Dr. A. Sai Kumar, Assistant Professor	Fault-Tolerant Core Mapping for NOC based architectures with improved Performance and Energy Efficiency	2022 29th IEEE International Conference on Electronics, Circuits and Systems (ICECS) 978-1-6654-8823-5 12th December 2022

22	Dr. A. Sai Kumar, Assistant Professor	Characterization for Sub-5nm Technology Nodes of Junction less Gate-All-Around Nanowire FETs	2022 13th International Conference on Computing Communication and Networking Technologies (ICCCNT) 978-1-6654-5262-5 26th December 2022
23	Dr. A. Sai Kumar, Assistant Professor	Design of High Speed 8-bit Vedic Multiplier using Brent Kung Adders	2022 13th International Conference on Computing Communication and Networking Technologies (ICCCNT) 978-1-6654-5262-5 26th December 2022
24	Mr. T. Srinivas, Assistant Professor	Black gram Plant Leaf Disease (BPLD) dataset for recognition and classification of diseases using computer-vision algorithms	Data in Brief Vol. 45, 2022, 108725, ISSN 2352-3409 December 2022
25	Ms. N. Neelima, Assistant Professor	An Efficient Door Access System Controlled by Temperature using LabVIEW	2022 13th International Conference on Computing Communication and Networking Technologies (ICCCNT) 978-1-6654-5262-5 26th December 2023
26	Ms. N. Neelima, Assistant Professor	An Efficient two Dimensional Mapping of External Surroundings for Robotics and Drones	2022 13th International Conference on Computing Communication and Networking Technologies (ICCCNT) 978-1-6654-5262-5 26th December 2023
27	Mr. D. Santhosh Kumar, Assistant Professor	A Technique to Improve the Lifetime of Heterogeneous Wireless Sensor Networks by Removing Redundant Packets	2022 International Conference on Edge Computing and Applications (ICECAA) 978-1-6654-8232-5 08th November 2022

A successful man is one who can lay a firm foundation with the bricks others have thrown at him.

—David Brinkley



Visit to Ananth Technologies Limited

24th & 26th November 2022.

Insights

- Ananth Technologies Limited (ATL) was founded in 1992 by Dr. Pavuluri Subba Rao, a retired ISRO scientist, to leverage aerospace technologies for India's economic growth.
- ATL develops satellite products like AOCE and solar panels, MSS terminals for fishers, and projects like the Advanced Night Vision Laser System (ANVIL), with major clients including ISRO, DRDO, and the Indian Army.
- The company is headquartered in Hyderabad with branches in Thiruvananthapuram and Bangalore; Hyderabad focuses on Digital Design, R&D, Optics, and RF, while Thiruvananthapuram specializes in satellites.
- Notable projects include the Telescopic Sight for Assault Rifles, integration for PSLV satellites, and research in missiles (BrahMos and Agni) and Pulse Code Modulation (PCM).
- ATL emphasizes using Indian-made components and conducts rigorous environmental testing (thermal, vibration, bump, acceleration, and humidity) on the -2 floor of their building, which has specialized chambers.

Out of the mountain of despair, a stone of hope.

-Martin Luther King Jr.

INDUSTRIAL VISIT GALLERY



JIA MSME Expo

JIA MSME Expo



Educaion is what remains after one has forgotten
what one has learned in school.
-Albert Einstein

Upcoming Events

- IEEE International Conferences 2023 (ICAECT 2023) 04th to 06th January 2023, Shri Shankaracharya, India
- 6th International Conference on Intelligent Data Communication Technologies and Internet of Things, 05th to 07th January 2023, REVA university, Bangalore.
- 07th International Conference on Robotics,Control and Automation, 05th to 07th January 2023, Taizhou,China.
- IEEE International Conference on Consumer Electronics (ICCE), 06th to 08th January 2023, Las Vegas, USA.
- SII 2023: IEEE/SICE International Symposium on System Integration,17th to 20th January 2023, Atlanta, USA.
- 3rd version of International Conference on Intelligent Communication and Computational Techniques (ICCT'22), 19th to 20th January 2023, Manipal university, Rajasthan, India.
- 1st IEEE Applied Sensing Conference, 23rd to 25th January 2023, Bengaluru, India.
- International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (IITCEE 2023), 27th to 28th January 2023, BNMIT, Bangalore.
- 2023 Fourth International Symposium on 3D Power Electronics Integration and Manufacturing (3D-PEIM), 01st to 03rd February 2023,Miami, Florida USA.
- IEEE International conference on “Artificial Intelligence and Smart Systems” (ICAIS 2023), 02nd to 04th February 2023, Coimbatore, India.
- 2022 19th China International Forum on Solid State Lighting & 2022 08th International Forum on Wide Bandgap Semiconductors (SSLCHINA: IFWS), 07th to 10th February 2023, Suzhou, China.
- The 11th International conference on Internet of Everything, Microwave Engineering, Communication and Networks (IEMECON), 10th to 11th February 2023, Jaipur, India.
- IEEE International Conference on Consumer Electronics (ICCE 2023), 11th to 13 February 2023, Las Vegas, Nevada, USA.
- 2023 IEEE Design and Technology of Modern Electronic Systems (DTMES),13th to 15th February 2023, Addis Ababa, Ethiopia.
- IEEE International Conference on Big Data and Smart Computing (Big Comp 2023), 13th to 16th February 2023, Jeju, South Korea.
- IEEE 17th International Conference on Advanced Motion Control, 18th to 20th February 2023, Padova, Italy.
- IEEE International Conference on Industrial Technology (ICIT 2023), 22nd to 25th February 2023, Florida, USA.
-

Tech News

- Mangalyaan, the Indian Mars Orbiter Craft runs out of fuel and battery after completing 8 years. Mangalyaan was a huge achievement for the Indian Space Research Organization.
- The heaviest rocket LVM3 of the Indian Space Research Organization (ISRO) will launch 36 satellites of British start-up OneWeb. It will mark the the launcher's entry into the global commercial market
- Indian scientists developed an indigenous Overhauser Magnetometer, one of the most accurate Magnetometers extensively used in all magnetic observatories around the world.
- Chandrayaan-2 Orbiter's X-ray spectrometer 'CLASS' has mapped an abundance of sodium on the moon for the first time, as per the Indian Space Research Organisation (ISRO).
- Elon Musk unveils Optimus robot's prototype: Elon Musk, the CEO of Tesla, unveiled a model of the humanoid "Optimus" robot, which uses some of the same AI system as in Tesla vehicles.
- Vikram-S by Hyderabad-based Skyroot Aerospace is poised to create history as it undergoes final launch preparations at the ISRO launchpad in Sriharikota for launch.
- The Indian Space Research Organization launched PLV-C54/EOS-06 Mission with Oceans-3 and eight nanosatellites on board from Sriharikota spaceport.
- NASA's Artemis 1 Orion Capsule has set a new space flight record for spacecraft designed to carry humans by traveling 4,01,798 kilometers from Earth.
- Telangana's IT and Industries Minister K T Rama Rao on said the state will have the country's first integrated rocket design, manufacturing and testing facility.
- RH200, the versatile sounding rocket of ISRO registered its 200th consecutive successful launch from the shores of Thumba, Thiruvananthapuram.
- Indian Institute of Technology Madras (IIT Madras) Researchers have developed an 'Ocean Wave Energy Converter' that can generate electricity from sea waves.
- A SpaceX Falcon 9 rocket carried into space the first ever Arab-built lunar spacecraft. It was launched from the Cape Canaveral Space Force Station in Florida.
- Indian Space Research Organisation (ISRO) successfully conducted a joint hypersonic vehicle trial along with the Headquarters, Integrated Defence Staff (HQ IDS).
- The US National Aeronautics and Space Administration (NASA) and the French space agency Centre National d'Etudes Spatiales (CNES) have jointly launched the SWOT spacecraft.
- The SpaceX Falcon 9 launch vehicle launched into low Earth Orbit the first 54 Starlink Satellites of the new generation, or v2.0 or Gen2.

Ideas are knowledge. When we share knowledge in the written or verbal form, amazing things can happen. -Jim Rohn

Articles

Where the mind is without fear and the head is held high

The poetry of Rabrinath Tagore looks very apt and contextual to the current scenario though it had been written 100 years back. Engineering education has transformed drastically from being a skill-based course to a demand-based course. This trend of demand and supply has crept subconsciously into the education sector and is leading to savage consequences.

The euphoria and mania towards computer science related courses by the parents and students alike, has uprooted the existence of pivotal courses like Civil, mechanical and electrical engineering courses. In the society we live, are we marching ahead to stay in structures or buildings which are not engineered by qualified Civil Engineers? Are the machines and engines that we use on a daily basis going to be designed by unqualified mechanical engineers? Are we aiming to build a future world depriving our next generation from energy and power resources, as we can't have qualified electrical engineers guiding us through energy management or renewable energy sources?

Though there have been numerous avenues of job opportunities in the core domains of engineering, why aren't they being explored? Why has it become an image issue to land up in a computer related course by every aspiring engineer? Is it the luring perks, comfort of work from home or the nature of work that is drawing the attention of both parents and students? Are we looking for instant gratification or long-term job fulfillment?

Workforce transitions are bound to happen eventually and there may be a major paradigm shift coming shortly. But till then keep your head high without any fear in mind about the knowledge you are accumulating and the subsequent dissemination that can happen, thereby contributing to the betterment of the society. Have the nerve to be a core competent professional Engineer.

D.Kanthi Sudha

Assistant Professor ECE & Coordinator Admissions

Creative
Corner



“I have never let my schooling interfere with my education.”

— Mark Twain

A Diamond Pearl

All the birds soaring in the sky above the apex,
All the lapidaries are snoring at the base of a peak.
Jewels of stones were ready to mock-up,
People were ready to wake-up.
Each of stone was trapped by the lapidary,
Each of pebble was lastingly Clammy.
All the lapidaries are agog to acclimatizing,
From all the brilliant break through emerges a alluring.
Each one of astound by the gleaming,
Each one of them enlighten their smile.
All the people are attracted,
All the stones set off disgusting to alluring.
Name whom am I?
Me by and by whooped as a "Diamond Pearl".

Tripati
21071A0402
ECE A

నగరం

- నేను ఉండేది నగరంలో,
నేను పెరిగి పెద్దయిందీ నగరంలోనే
- పెద్ద పెద్ద అందమైన భవనాలు ఉంటాయి,
ఆ భవనాల్లో ఉంటాయి అనేక వింతలు
- నాకు ఇష్టమైన నగరం మా హైదరాబాదు,
దాంట్లో నిర్మించి ఉంటాయి ఎన్నో పురాణ కట్టడాలు
- నగరంలో ప్రతి ఒక్కటీ యంత్ర నిర్మాణమయం,
దీంతో మాకు అవుతుంది ప్రతీ పని సులువు
- ఈ మధ్య చేస్తున్నాము హరితహారం,
దాంతో మా నగరం అవుతుంది పచ్చదనం
- నగరంలో ఉండదు ఏ లోటూ,
నగరమంతా ఎల్లవేళలా ఆరోగ్యకరం.

J. Radhika
2007IA0475
ECE B

"Education is the key to success in life, and teachers make a lasting impact in the lives of their students." - Solomon Ortiz

To solve or not to?

1. Information
2. Modulation
3. Carrier
4. Amplitude
5. Transmission
6. Digitization
7. Channel
8. Passband
9. Side band
10. Noise
11. Delta modulation
12. Receiver

WORD SEARCH

Q	W	E	I	R	T	Y	F	S	H	J	K	T	F	C	V
V	C	S	N	S	D	F	G	H	B	V	X	S	C	X	V
D	E	G	F	D	F	G	H	Y	T	E	F	F	C	S	E
W	E	E	O	T	F	G	H	Y	U	D	S	D	F	C	M
F	C	A	R	R	I	E	R	R	G	D	S	C	F	D	S
H	G	D	M	O	D	U	L	A	T	I	O	N	K	M	V
Y	H	L	A	T	X	M	I	M	K	M	N	B	V	F	C
H	E	K	T	G	S	N	U	P	G	H	S	D	D	C	V
G	R	J	I	B	A	B	Y	L	A	R	T	Y	U	I	O
F	T	H	O	G	S	V	T	I	H	S	R	F	C	V	B
D	Y	G	N	T	D	C	F	T	Y	N	S	U	G	T	F
E	F	F	T	O	F	X	R	U	I	P	I	B	M	N	B
R	G	D	R	T	I	Z	R	D	O	I	D	J	A	F	D
T	H	V	F	E	G	S	E	E	T	G	E	D	D	N	H
H	J	G	V	R	H	P	E	R	E	B	B	E	D	C	D
Y	N	B	A	E	J	O	W	T	V	D	A	X	S	W	J
U	J	O	S	F	K	I	W	T	C	S	N	S	S	X	Z
K	H	H	I	G	L	U	S	T	V	D	D	W	A	S	X
Y	N	O	I	T	A	L	U	D	O	M	A	T	L	E	D
T	H	F	C	H	A	N	N	E	L	Y	T	D	K	Y	R
R	B	E	Z	H	W	Z	D	Y	T	D	F	G	D	F	F
R	G	T	X	J	E	Y	I	G	B	H	N	O	F	D	D
T	G	Y	C	H	R	T	D	T	Y	O	R	F	E	D	E
H	R	U	M	U	T	R	F	Y	I	F	I	C	D	S	S
J	F	I	B	I	Y	R	G	S	H	G	B	R	D	C	D
U	D	O	W	S	U	E	S	Y	H	F	I	D	Y	H	G
L	S	P	E	P	I	I	X	N	B	H	C	D	F	B	G
I	R	Q	R	O	M	E	C	R	G	B	F	D	G	F	G
O	Y	W	T	S	J	W	V	Q	W	E	R	T	H	R	G
Y	R	E	N	I	P	Q	B	A	S	D	F	D	R	T	G
R	T	A	U	U	J	W	N	L	K	J	H	G	D	T	G
W	R	E	C	E	I	V	E	R	R	F	F	S	R	E	F
T	M	G	J	Y	M	U	M	R	T	E	F	F	D	N	H

Answers to the puzzles of the previous issue.

1. Computer, 2. Router, 3. Internet, 4. Server, 5. IP Address, 6. Session layer,
7. Circuit switching, 8. Firewall, 9. Protocol, 10. Network topology,
11. Ethernet

"Knowledge is power. Information is liberating. Education is the premise of progress, in every society, in every family."

- Kofi Annan

Editorial Team

Chief Editor

Dr. Rajendra Prasad S
Professor & Head

Editors

Nelan Satish, Assistant Professor
Sangeetha K, Assistant Professor

Student Members

Nandini D
Pallavi Sharma
T. Neha
P. Gnaneswari
Abhinav K
Sai Arun Y

Our Faculty

