



Department of Electronics and Instrumentation Engineering

EDITORIAL BOARD

Chief Editor



Dr.S.Senthilkumar
Assistant Professor

Associate Editor



Mr.K.Vijay Chandra
Assistant Professor

Students Associates

K.Sri Nithya (16071A1023)
K.Sreya (16071A1019)
Kiran Verma (16071A1021)

Editorial

Automation-Boon or Bane

Every coin has two sides. So does the enhancement in technology. When one side offers opportunities and confidence, the other plunges its harder truth in the fear of losing existing opportunities along with the white collar jobs. The Indian economy is in transition with the on-going impact of automation on the employment of certain population which are involved in industrial control and services sector. Though automation leads to creation of various new jobs(which are in need of high experience),the destruction of the jobs which are high in number with the present economic situation is even more concerning. Under controlled scenarios automation reduces the cost of a firm, leads to reduced corruption and bureaucratic discretion. It also increases the social economic infrastructural level which in turn attracts high range investments developing the country's national and international standards. Automation becomes a problem when higher number of jobs is at stake. The requirement of new jobs is freelancing at nature thus pressuring abnormal situations among employees. As we can clearly integrate the changes brought by this developing side of technology, let's hope for the right mix of solution to be brought in the varied interests of the economy as a whole.

**VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI
INSTITUTE OF ENGINEERING AND TECHNOLOGY**

An Autonomous Institute, NAAC Accredited with A++ Grade
NBA Accredited for CE, EEE, ME, ECE, CSE, EIE, IT B.Tech Courses
Approved by AICTE, New Delhi, Affiliated to JNTUH
Recognized as "College with Potential for Excellence" by UGC
EAMCET CODE: VJEC PGECETCODE: VJEC1



Message from HOD



Factual content and procedures that constitute the knowledge base of the discipline around the big ideas of the domain, links new knowledge to what is already known by presenting concepts in a conceptually and logically sequenced order that builds upon previous learning within and across grade levels. Some Interaction session are organized for faculty members of ECE & EIE like “Seizure Predictability and Study of sudden unexpected death in Epilepsy using machine learning and Association Measures”, by Dr.Bharat K Karumuri (USA) and Psychological Counselling Session for of I, II & III Year EIE students is organized by “Roshni”. Looking forward for an improved, bright and enthusiastic environment in the department.

Dr. R. Manjula Sree
HOD: EIE

Students Achievements

- 4 students have been selected for Internship in T – Works, Brane services, Under 25 & Keeline Appliances Pvt Ltd.

Students Internship Details:

S.No	Name	Roll No.	Name of the Company
1	Suhas Patlolla	19071A1044	T - Works
2	Roshini Byroju	20075A1010	Brane services
3	Ch. Manvitha Sree Poorna	21071A1078	Under 25
4	Bandi Venu Prasad	19071A1061	Keeline appliances
5	Narukulla Dadeepya Krishna	19071A1032	Media mint
6	Arukala Sahithi	19071A1059	Colruyt Group India
7	Mellacheruvu Krishna Dhanush	19071A1085	TCS
8	Nagaraju Sarath Chandra Satya Prakash	19071A1090	TCS

Students Achievements (Contd.)

Students Placement

S.No	Name of the Student	Roll No.	Name of the Company
1	Subodh Retan	20075A1007	Keeline Appliance
2	Suhas Patlolla	19071A1044	T - Works
3	Dhakshayani Jamedar	19071A1072	Worley
4	Narukulla Dadeepya Krishna	19071A1032	Media Mint
5	Roshini Byroju	20075A1010	Brane Services
6	Ch. Manvitha Sree Poorna	21071A1078	Under 25
7	Bandi Venu Prasad	19071A1061	Keeline Appliances PVT LTD
8	Guguloth Venkatesh	18071A1020	Mindtree digital practicum (internship)
9	Dhakshayani Jamedar	19071A1072	Worley
10	Ellendula Vinay Kumar	19071A1013	Kanso Cloud
11	Arukala Sahithi	19071A1059	Colruyt Group India

Students sponsored for Guest Lecture / Seminars / Workshops / Training Programmes /Sports / Webinars conducted in the Institute/outside the Institute:

S. No.	Details of participants	Event attended	Organized by	Topic	Dates of Event
1	Guest lecture on Lithium-ion-Batteries – Present and Future trends in Electric Vehicles	II Year Students	05th January 2023	17 students	Lecture given by Dr. Rajeev Ramana, Lead Software Architect at General Motors Michigan, USA organized by Department of H & S

"Leadership and learning are indispensable to each other."

-John F. Kennedy

2	South India Inter University Volleyball Championship, held at Mahatma Gandhi University, Kottayam	I Year Student participated. (Ch. Sarika - 22071A1080)	27th Dec - 31 Dec 2022	2 students from VNRVJIET	Women Volley Players of our institute have represented JNTUH.
3	South India Inter University Volleyball Championship, held at SRM University, Madras	II Year student participated. (K. Sri kanth Reddy - 21071A1095)	26th Dec - 31st Dec 2022	3 students from VNRVJIET	The following men basketball players of our institute have represented JNTUH.
4	All India University Taekwondo championship held at Guru Nanak Dev University, Amritsar, Punjab.	I Year Student (K. Sri Bharath Varma - 22071A1094)	3rd Jan - 6th Jan 2023	1 student from VNRVJIET	The following men basketball players of our institute have represented JNTUH.
5	Workshop on Robotics and Drones	I and II B.Tech EIE, ECE, EEE, CSE and IT students	24th to 25th January 2023	84 students	I and II B.Tech students were trained to design basic robots like line following robots etc.
6	Training Program on Verilog Programming (VLSI)	III B.Tech EIE-I & EIE-II students	from December 2022 till date	60 students	M/s. Lucisd VLSI
7	Training program on Smart Interviews (Competitive Programming and Problem Solving)	III B.Tech EIE-I & EIE-II students	from December 2022 till date	60 students	M/s. Code Evolve and Excel Pvt.Ltd.
8	Guest Lecture on "IoT-Domain specific Applications", by Dr. S V Srikanth, Joint Director, CDAC, Hyderabad	I Year EIE Students	25th February 2023	110 students and 3 faculty members	As a part of partial coverage of syllabus by industry expert, in the subject Internet of things with course IoT -Domain Specific Applications
9	IEEE Robotics & Automation Society and VNRVJIET organized 2-day workshop for EIE, EEE, ECE, ME & AE students on Smart Agriculture Robot	I & III Year Students	27th & 28th Feb 2023	65 students participated	Agriculture Robot is a lightweight, solar-electric powered robot that uses intelligent perception for conducting detection and classification of plants and their characteristics. The system also has a robotic arm for the autonomous weed cutting process.
10	National level Inter Engineering College Fest at CVR Hyderabad	I Year EIE Student -Kotha Srikanth Reddy (21071A1095)	1st-5th February 2023	01	Participated in Mens Basket Ball Tournament

11	14th Indian Open Inter Engineering College Sport Fest at VNRVJIET Hyderabad.	II Year EIE Student - Kotha Srikanth Reddy (21071A1095) and	9th 10th February 2023	01	Participated in Mens Basket Ball Tournament
12	14th Indian Open Inter Engineering College Sport Fest at VNRVJIET Hyderabad.	I Yar EIE Student - Ch.Sarika (22071A1080)	9th 10th February 2023	01	Participated in Womens Basket Ball Tournament
13	Training Program on Web Technologies in association with Dept. of CSE	II Year EIE Students	From 24th March to July 2023 (Every Friday)	115	Students will learn about 5 Web Frame works & Technologies for Website Development in Front-end & Back-end
14	Webathon Organized by ACM	II Year EIE Students	27th-28th March 2023	20	Association For Computing Machinery (ACM), Student chapter of VNRVJIET is conducting Webathon for all Students.

Events Organized

- Parents Teachers meeting for I Year EIE students held on 28th January 2023 in the department library from 2:00PM onwards.



- Matrixing for I Year Students FAY 2022-23 is conducted in the department on 09-02-2023.



- Guest Lecture is Organized for I Year EIE Students on “IoT-Domain specific Applications”, by Dr. S V Srikanth, Joint Director, CDAC, Hyderabad. In APJ Abdul Kalam Auditorium, VNRVJIET on 25th February 2023 from 10:00am to 12:00noon. 110 students and 3 faculty members attended the lecture.



- External Academic Audit for the academic year 2021-22 is conducted on 04-03-2023 in the department, by Internal Assessor Dr.L.Anjaneyulu, Professor, Department of ECE NIT Warangal and Dr.V.N.Sailaja, Asst.Professor, Dept. of CSE, VNRVJIET .



- 15th Board of Studies (BoS) meeting conducted in the department of EIE on 16th March 2023.



- 2-day workshop organized for EIE, EEE, ECE, ME & AE students on “Smart Agriculture Robot”, in collaboration with IEEE Robotics & Automation Society and VNRVJIET during 27th & 28th Feb 2023. I & III Year EIE students are participated.

Faculty Participation

- 10 faculty members have registered for Swayam NPTEL Courses and are in progress.
- Dr. C.Kiran, Assoc.Professor, attended FalconX Global Immersion Programme 2.0 at T-Hub as the GRO@VNRVJIET and Manager-VJ Hub on 10th January 2023.
- Mr. Ch.Venkanna, Asst.Professor, attended 3rd Phase of Faculty Induction Programme for newly joined faculty organized by department of H & S from 11th-13th January 2023.
- Dr. R.Manjula Sri, Professor & Head and Dr.M.Hari Krishna, Assoc.Professor attended one week Advance Management Development Program on Telemedicine in Rural Healthcare Sponsored by DC-MSME, Ministry of MSME, Government of India at NIT Campus, Warangal during 16th – 21st January 2023.
- Mrs.Jyothirmai Joshi & Ch.Venkanna, Asst.Professors, attended One week Workshop on Design Thinking organized by CPADT Team, VNRVJIET, Hyderabad from 17th-21st January 2023.
- Dr.K.Vijay Kumar, Asst.Professor, attended Sarang 2023 organized by IIT M, Chennai, from 11th-15th January 2023
- Dr.R.Manjula Sri, Professor & Head, Dr.V.Nageshwar, Assoc.Professor attended IEEE Chapters Symposium on 29-01-2023 organized by IEEE Hyderabad Section at Le Meridian, Madhapur, Hyderabad.
- Dr.R.Manjula Sri, Professor & Head, attended TS PG CET 2023 Syllabus Committee Meeting at JNTUH on 30-01-2023. Called by R & D, JNTUH, Hyderabad.
- Mrs.D.Srilaxmi, Mrs. P.Sampurna Lakshmi and Ms. D.Swetha, Asst.Professors attended Faculty Development Program on Data Science for Engineers organized by Department of CSE(AI & ML and IoT), VNRVJIET from 23rd-28th January 2023.
- 10 faculty members have registered for Swayam NPTEL Courses and are in progress.

- Dr.R.Manjula Sri, Professor & Head, attended a talk on Metaverse- an Emerging Technology, by Ms Nirmala Darla, Executive Vice President, Engineering and Research, HCL Technologies, Hyderabad., organized by IEEE WIE AG Hyderabad section. on 1st February 2023.,4pm onwards.
- Dr.R. Manjula Sri, Professor & Head, attended and Delivered lecture on 06-02-2023 on “AI Approach to Predict Major Health Risk Factors from Retinal Images”, in Faculty Development Program on Artificial Intelligence in Bio medical Signal Processing organized by DVR & Dr.HS MIC College of Technology & Electronics and ICT Academy, Department of ECE, NIT Warangal from 6th-13th February 2023.
- Ms.Anitha Kulkarni, Assoc.Professor, attended and Presented paper in the international conference of IEEE 3rd International Conference on "Technology, Engineering, Management for Societal Impact Using Marketing, Entrepreneurship and Talent (TEMSMET2023) titled “ Unbounded Convergence based Channel Estimation in MIMO”, at Vidya Vikas Institute of Engineering and Technology, Mysuru during 10th & 11th February 2023.
- Ms.D.Swetha, Asst.Professor, attended Faculty Development Program on “ AI in Biomedical Signal Processing”, organized by DVR and Dr HS MIC College of Technology, NIT Warangal from 06th - 13th February 2023.
- Dr.C.Kiran, Asst.Professor, attended E-summit at MU as Manager-VJ Hub and Convener-IIC, as well as AECC Global Education Fair at AECC Kukatpally Office on 15th February 2023.
- Dr.M.Hari Krishna & Ms.Anitha Kulkarni, Assoc.Professors and Ms. S.Vandana, Asst.Professor attended of 2-day workshop on “Enriching Quality of Academics & Research in Relevance to NEP-2020” at B-block Seminar Hall on 24th & 25th Feb 2023.
- IUCEE VNRVJIET student chapter launch on 22nd Feb 2023 in K.S. Auditorium. Ms. Srujana as president, and Lokesh Kumar from EIE department were participated
- 10 faculty members have registered for Swayam NPTEL Courses and are in progress.
- Dr.K.Sudha Rani, Assoc.Professor, attended Udeemy online certification “Master Arduino by building Real world applications”, during March 2023.
- Dr. Chakravarthula Kiran, Assoc. Professor attended HYSEA Startup Innovation Confluence at Novotel, as the Manager-VJ Hub on 15th March 2023.
- Dr. Chakravarthula Kiran, Assoc. Professor attended the inaugural of CII Centre of Excellence for Innovation, Entrepreneurship, and Startups (CIES) at T-Hub, as the Manager-VJ Hub on 16th March 2023.
- Dr. Chakravarthula Kiran,Assoc. Professor attended Roundtable event with UK's University of Leicester, up on invitation from Mr. Navin Mittal, as the Global Relationships Officer on 17th March 2023
- The following faculty members attended training Session on “OER -Open Education Resources”, by Dr.T.Sushumna Rao, organized by Dept. of H&S, VNRVJIET in Room No -A113 VNRVJIET on 18th March 2023.

Mr.A.Adithya Kashyap,	Asst.Professor, EIE
Mrs.S.S. Bharathi Sagi	Asst. Professor, EIE
Mr.Ch.Venkanna	Asst. Professor, EIE
Mrs.R.Suneetha	Sr.Skilled Asst. EIE
- Dr.K.Vidya Sagar, Professor attended online Faculty Development Program from Udeemy Certificate course on “ Introduction to Process control and Instrumentation on 23rd March 2023.

- The following faculty members attended 5 -Day Faculty Development Program on “Instructional Design & Delivery Systems”, by Dr.G.Janardhanan & Dr.V.Shanmuganeethi from The National Institute of Technical Teachers Training and Research (NITTTR), Chennai, conducted by Dept. of H&S in VJ Hostel VNRVJIET from 21st to 25th March 2023.

Dr.M.Sreedhar,	Professor,EIE
Mr.C.V.Ram Babu	Asst. Professor, EIE

- The following technical staff members attended 3-day Training program on “Centre of Excellence by Blue Star”, organized by Dept. of Mechanical Engineering in association with M/s.Blue Star Ltd. from 23rd-25th March 2023.

Mrs. R.Suneetha	Instructor.
Ms. G.Suma Bala	Sr.Skilled Asst.
Mr. K.Naresh Kumar	Sr.Skilled Asst.

- The following faculty members went to attend ISOI Hyderabad section inaugural event & Two Day Workshop at Methodist Engineering Collage, Hyderabad.

Dr.R.Manjula Sri	Professor & Head
Dr.V.Nageshwar	Assoc.Professor
Mrs.S.S.Bharati Sagi	Asst.Professor
Mrs. Jyothirmai Joshi	Asst.Professor

- The following faculty members attended Professional Development Program on “Research Opportunities in the Transformation towards Digital Ecosystem”, by Dr.L.Pratap Reddy,Professor, ECE JNTUH, organized by IEEE Students Chapter, VNRVJIET in B-Block Seminar Hall on 24th March 2023.

Dr.M.Hari Krishna	Assoc.Professor
Mrs. Anitha Kulkarni	Assoc.Professor
Mr.Adhitya Kashyap	Asst.Professor

- The following faculty members from the department attended interaction session with Sri KVM DevaRaju, Academician, Scientist and IT expert on 27-03-2023 in Embedded Systems Lab (P-103) at 3pm.

Dr.R.Manjula Sri	Professor & Head
Dr.S.Pranavanand	Assoc.Professor
Dr.K.Sudha Rani	Assoc.Professor

Faculty Achievements

- Mr. N.Akshay and Ms.D.Srilaxmi, Asst.Professors, EIE got “Certificate of Appreciation”, for being recognized as NPTEL BELIEVER during Jul-Dec 2022.



- Dr.R.Manjula Sri, Professor & Head, recognized as member in PGCET 2023 Syllabus Committee, JNTUH, Hyderabad.
- Dr.R.Manjula Sri has published a patent entitled “Drill Cabin System for Safe Driving”, VNRVJIET as applicant and Dr.D.N.Rao, Dr.R.Manjula sri, Ms.P.Samatha, Ms.R.Manju Sahiti and Dr.S.Pranavanand as Inventors, on 27th January 2023.
- Published Patent entitled “A NON-INVASIVE DEVICE FOR MODULUS MEASUREMENT OF PAVEMENT LAYERS”, VNRVJIET as applicant and Dr. A. Ramesh, Dr.Ch.Nageshwar Rao, G. Sandeep Reddy and Dr. S. Pranavanand as Inventors, on 19th January 2023.
- Dr.S.Pranavanand got Patent Grant entitled “AUTOMATIC AIRLOCK PREVENTION SYSTEM AND METHOD THEREOF”, for 20 years.
- Dr.R.Manjula Sri, Professor & Head, has been recognized as eligible guide by R & D JNTUH.
- Patent granted entitled “COOKING APPLIANCE”, VNRVJIET as applicant and Dr. S. Pranavanand Mr. Haroon Rasheed, Dr. A. Raghuram, Dr. C. D. Naidu, Dr. B. Rajasekara Reddy as Inventors, on 9th March 2023.

Research and Development (R & D)

Patents & Book Chapters Filed/Published:

- Published Patent entitled “Drill Cabin System for Safe Driving”, VNRVJIET as applicant and Dr.D.N.Rao, Dr.R.Manjula sri, Ms.P.Samatha, Ms.R.Manju Sahiti and Dr.S.Pranavanand as Inventors, on 27th January 2023.
- Published Patent entitled “A NON-INVASIVE DEVICE FOR MODULUS MEASUREMENT OF PAVEMENT LAYERS”, VNRVJIET as applicant and Dr. A. Ramesh, Dr. Ch.Nageshwar Rao, G. Sandeep Reddy and Dr. S. Pranavanand as Inventors, on 19th January 2023.

- Dr.S.Pranavanand got Patent Grant entitled “Automatic Airlock Prevention System and Method Thereof”, for 20 years.
- **Patent granted** entitled “**COOKING APPLIANCE**”, VNRVJIET as applicant and Dr. S. Pranavanand Mr. Haroon Rasheed, Dr. A. Raghuram, Dr. C.D.Naidu, Dr.B. Rajasekara Reddy as Inventors, on 9th March 2023.

Journals

Faculty Name, Designation & Department	List of Authors in the order that appears on the paper	Full Title of the Paper	Conference in which the Paper Published	Volume Issue, Page Nos.	Date/ Month & Year of Publication	ISSN No. / ISBN No.	Indexed
Anita Kulkarni	Anita Kulkarni & Dr. K Sridevi	Improved Resource Scheduler using Kalman Filter in Wireless Communication	International Journal of Engineering Trends and Technology (IJETT 2023)	Volume 71 Issue 2, 129-136	February 2023	ISSN: 2231 - 5381	Scopus
Anita Kulkarni	Anita Kulkarni & Dr. K Sridevi	Improved Resource Scheduler using Kalman Filter in Wireless Communication	International Journal of Engineering Trends and Technology- IJETT 2023	Volume 71 Issue 2, 129-136	February 2023	ISSN: 2231 - 5381	Anita Kulkarni
Manjula Sri Rayudu	P Sampurna Lakshmi, S Sivagamasundari Manjula Sri Rayudu	IoT based solar panel fault and maintenance detection using decision tree. with light gradient boosting	International Journal of Measurement: Sensors	Published Online	March 2023	ISSN-2665-9174	Manjula Sri Rayudu

"A leader takes people where they want to go. A great leader takes people where they don't necessarily want to go, but ought to be."

-Rosalynn Carter

Conferences

Faculty Name, Designation & Department	List of Authors in the order that appears on the paper	Full title of the paper	Conference in which the paper published	Volume Issue, Page Nos.	Date/ Month & Year of publication
Anita Kulkarni	Anita Kulkarni & Dr. K Sridevi	Unbounded Convergence based Channel Estimation in MIMO	IEEE 3rd International Conference on "Technology, Engineering, Management for Societal Impact Using Marketing, Entrepreneurship and Talent (TEMSMET2023)	---	11th Feb 2023

"Leadership and learning are indispensable to each other."

-John F. Kennedy

