



Dr. J. SUNITHA KUMARI

B.Tech , M.E, Ph.D

Associate Professor

LMISTE, MIETE

Electronics and Communication Engineering

Areas of Interest

1. Microwave Engineering
2. Radar Systems
3. Electronic Devices and Circuits
4. Antenna and Wave Propagation
5. Image Processing

EDUCATIONAL & PROFESSIONAL

Academic Qualifications

- M.E (MRE) in Microwave and Radar Engineering, ECE, College of Engineering, OU, Hyderabad. (2005-2007).
- B.Tech in Electronics and Communication, Shadhan College of Engineering, affiliated to JNTU-Hyderabad in (1998-2002).
- Diploma in ECE from KNPW, Exhibition society, SBTET (1995-1998).

Professional Experience

- Associate Professor, TKRCET, Hyderabad (2007-tilldate)
- Assistant Professor, G. Narayanamma Institute of Technology and Science, Hyderabad (2006 –2007).
- Assistant Professor, TKRCET, Hyderabad (2004–2006).
- Assistant Professor, Arkay College of Engineering, Bodhan, Nizambad (2002-2004).

PUBLICATIONS:

1. Jujjavarapu Sunitha Kumari, Usha Rani Nelakuditi, Fuzzy Based Region Growing Segmentation with Modified Least Square Fitting Algorithm For Automatic Fetal Growth Estimation, Elsevier, 9th December 2022. <https://doi.org/10.1016/j.ijleo.2022.170376>
2. Dr. J. Sunitha Kumari , K Anil Kumar, G Sahith Reddy, G Nithish Goud, Detection of Earthquake in Forest using IOT, IJRAR, Volume 11, Issue 2, April 2024. (E-ISSN 2348-1269, P- ISSN 2349-5138).
3. Dr. J. SUNITHA KUMARI, K. Keerthi, G. Harish, G. Indupriya, Low Power 3-Bit Encoder Design using Memristor, IJRAR, Volume 11, Issue 2, April 2024. (E-ISSN 2348-1269, P- ISSN 2349-5138).
4. Dr. J. Sunitha Kumari, P. Hemanth Kumar, R. Rakesh, P. Avinash, Smart Attendance Management System using Facial Recognition, IJNRD, Volume 8, Issue 4, April-2023. ISSN: 2456-4184.
5. Dr. J. Sunitha Kumari, R. Hemanth Chandra, P. Shiva Sai Teja, N. Shiva Prasad, Design And Implementation of IOT Based Smart Mirror using Raspberry Pi, 2023 IJNRD, Volume 8, Issue 4, April 2023. ISSN: 2456-4184.
6. Sunitha Kumari Jijjavarapu, Usha Rani Nelakuditi, Gestational Age Determination of Ultrasound Fetal Images Using Artificial Neural Network, 1st International Conference on Intelligent Computing and Smart Communication Technologies, July 2019. ISBN No. 978-93-5382-460-0.
7. N. Pavan kalia, N. Suresh, M. Sai teja, M. Srujana, Dr. J. Sunitha Kumari, Cloud Based Blood Pressure Monitoring System, IJCRT, Volume 11, Issue 4 April 2023. ISSN: 2320-2882.
8. Dr. J. Sunitha Kumari, M.Srija, P. Pravalika, N. Ravi Kumar, P.Rutish, Industrial Parameters Monitoring using IOT, IJCRT, Volume 11, Issue 4 April 2023. ISSN: 2320-2882.
9. S. Radha, D. S. Shylu, P. Nagabushanam, J. Sunitha Kumari, Design of RF LNA with Resistive Feedback and Gain Peaking for Multi-Standard Application, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-7 Issue-4, November 2018.
10. P. Nagabushanam, S. Satheesh Kumar, J. Sunitha Kumari, S. Thomas George, Brain Mri Image Segmentation using Improved Sobel Method, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-7 Issue-4, November

2018.

11. Sunitha Kumari Jijavarapu, Usha Rani Nelakuditi, A Novel Approach for Fetal ECG Using Adaptive Filter Algorithm, International Journal of Research, e-ISSN: 2348-6848, p-ISSN: 2348-795X, Volume 04 Issue 09, August 2017.
12. Sunitha Kumari Jijavarapu, Usha Rani Nelakuditi, Study of the Image Registration Algorithms for Medical Applications, Journal of Advanced Research in Dynamical and Control Systems Vol. 9, Sp – 6, 2017.

EVENTS PARTICIPATED/ORGANISED:

Organized

- Organized 16th annual day carnival (31st march 2018)
- Organized ECE Technical Fest (ECTA), TKRCET.
- Organized Industrial visit to ARCI, 2019.
- Organizer for university Youth Festival organized by NSS Cell, JNTUH on 3rd February, 2018 at University Campus, Hyderabad.
- Organized state level **PRATHIBHA** conference in December 2005, and September-2006 as a part of **ISTE** Program.

Coordinated:

- Coordinated as judge for the university NSS Youth Festival, JNTUH on 2nd FEB, 2019.
- Coordinated One week staff development programme on “Modern Teaching Trends in Scientific and Technical Education” at TKR Educational society from 30th June to 6th July 2014.

Participated:

- Participated in One Week International Online FDP on “Emerging Trends in Electronic Circuit Design, Signal Processing, and Communications,” from 1st July to 6th July-2024. organized by the Dept. of ECE, KLEF Deemed to be University, Off Campus Bowrampet.
- Participated in AICTE Sponsored one Week online Short term Training Program on “Python Based Machine Learning, Fundamentals to Applications” (Phase – III), organized by Department of ECE, Anurag Engineering College, Kodad, 22-02-2021 to 27-02-2021.
- Participated in AICTE Training And Learning (ATAL) Academy Online FDP on *Sensors Technology*, Mizoram University, 15-02-2021 to 19-02-2021.

- Participated in 3-Day Awareness Program on “Industry Oriented Project Work on Signal Processing” organized by TKRCET in association with Matchwell Technology Solutions from 06-07-2020 to 08-07-2020.
- Participated in AICTE Participated in the One day workshop on Rural Community Engagement on 25th March 2019 organized by MGNCRE in collaboration with NSS Cell of JNTUH.
- Participated in the State level training of trainers on “Making Campus Plastic Free” organized by EPTRI ENVIS –HUB/RP in association with NSS Unit Sreyas institute of Engineering & Technology, Hyderabad on 22nd April, 2018 at SIET Campus.
- Participated in the “Two day training workshop on Rural Immersion” organized on 11th & 12th November-2017 at JNTUH Campus.
- Participated in Two day” Faculty Development program titled “Building Teacher Effectiveness” on 14th and 15th December, 2017 at Hyderabad, Organised by TASK.
- Participated in 40kms Trekking & Adventure Training organised by NSS cell, JNTUH from 21st -25th September, 2017 at Vignan Institute of Technology and science.
- Participated in One week workshop on NSS Teaching Methodologies jointly organized by NSS Unit, BVRIT, Narasapur & NSS Cell, JNTUH Supported by State NSS cell, Higher education department Government of Telangana from 25th -30th October, 2017 at BVRIT.
- Participated in the “ABACUS” Indo-Global overseas Education Fair – 2017 held on 16th September, 2017.
- Participated in Two day workshop on “PCB Design and fabrication” held on 25th and 26th October 2017 at TKRCET.
- Participated in Two day workshop on “Home Automation with IOT using Raspberry Pi” held on 18th & 19th August, 2017 at TKRCET.
- Participated in One day workshop on “Introduction to PYTHON “on 14th October 2017, at TKRCET.
- Participated in Two day workshop on “Image Processing Algorithms and Applications” conducted by Department of Electronics and communication, Guru Nanak Institutions Tehcnical Campus (16 & 17 Dec, 2016).
- Participated in Two day workshop on “Embedded and VLSI Design” on 11th & 12th August, 2014 held at TKR College of Engineering and Technology.

- Participated in 2 day workshop on “Digital IC DESIGN” on 23rd & 24th June, 2014 TKR College of Engineering and Technology.
- Participated in 2 day workshop on “Digital Image Processing Using MATLAB” on 6th & 7th Jan, 2014 TKR College of Engineering and Technology.
- Participated in Faculty development program on “Effective methods of teaching organized by INSTITUTE OF PUBLIC ENTERPRISE on 8th March, 2014.
- Participated in Faculty development program on “Research awareness in advanced VLSI Design held at TKR College of Engineering and Technology from 18th to 20th September 2014.
- Participated in Faculty development program on “Electromagnetic Theory And Transmission Lines With Emphasis on Matlab and Ansys” held at Geethanjali College of Engineering and Technology from 22nd to 27th December, 2014.
- Participated in Three day faculty development workshop on “Research Awareness in advanced VLSI Design “ during 18th to 20th September 2014, organized by department of ECE, TKRCET,
- Participated in Two day workshop on “Digital IC Design” conducted by Department of Electronics and communication, TKR College of Engineering and Technology (23 & 24 Jun, 2014).
- Participated in Two day workshop on “Embedded and VLSI Design” conducted by Department of Electronics and communication, TKR College of Engineering and Technology (11 & 12 Aug, 2014).
- Participated in Three day workshop on “Research Methodology” FROM 3rd to 5th October, 2013 organized by Department of Computer Science & Engineering, GITAM School of Technology, Hyderabad in association with ISTE A.P.
- Participated in Three day workshop on “PCB DESIGN” on 5th to 7th September, 2013 held at TKR College of Engineering and Technology.
- Attended International conference on “Recent Advances in Design, Development and Operation of Micro air Vehicles (ICRAMAV-2013) conducted by Jawaharlal Nehru Technological University, Hyderabad, from 21-11-2013 to 23-11-2013.
- Participated in two day on Faculty development program on “Teaching Pedagogy, Program Education Objective & Programme objectives” on 21st & 22nd June 2013 at TKRCET.

- Participated in Three day workshop on “PCB Design” conducted by Department of Electronics and communication Engineering, TKR College of Engineering and Technology(5thto7th September, 2013)
- Participated in Three day workshop on “Internal Audit Training (Based on ISO 9000:2000 and ISO 19011:2002)” in G. Narayanamma College of Engineering and Technology, Shaikpet, Hyderabad, during Aug 29th-31st 2007.
- Participated in Two day workshop on “DSP Processors and its applications” conducted by Department of Electronics and Communication Engineering, TKR College of Engineering and Technology (18 & 19 Feb, 2006)
- Participated in One day workshop on “Recent trends in Microwave Engineering” conducted by Department of Electronics and communication Engineering, University college of engineering, Osmania University, Hyderabad, October-30, 2006.

Teaching:

- Microwave Engineering, Radar Engineering, Semi-conductor Devices & Circuits, Antennas & Wave Propagation, Electromagnetic Waves & Transmission Lines, Analog Communications, Digital Communications, Electronic Measurements & Instrumentation, Tele-communications Systems & Switching Networks, Pulse & Digital Circuits, Linear & Digital IC Applications

Administrative Positions Held:

- NSS Programme Officer, TKR College of Engineering and Technology (2008 till date)
- EDC Cell Coordinator, TKR College of Engineering and Technology.
- **ISTE** (Indian Society for Technical Education) Cordinator of TKR College of Engg. and Technology.
- Member, Student Counseling and Guidance cell at TKRCET.
- Member, Grievance Committee at TKRCET.
- Member, Anti-ragging Committee at TKRCET.
- Member Class Review Committee at TKRCET.
- Technical fest, ECTA coordinator 2017

- Coordinator for conducting Guest lectures at TKRCET.
- Incharge of NBA files during NBA visit 2008 in TKRCET
- **JNTU** Observer of Final examinations for B.Tech courses.
- Incharge of NBA files and also was the Hospitality member during NBA visit 2007, in TKRCET.
- Volunteered for Sanskrithi (ECTA), Cultural Association, Department of ECE, TKRCET.

Contact:

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Electronics and Communication Engineering

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