FACULTY PROFILE

Faculty Name: Dr. M. M. Raghavendra **Designation:** Associate Professor

Department: Electronics and Communication Engineering

Institution: Dr. K. V. Subba Reddy Institute of Technology, Kurnool



Faculty Description

I am a dedicated academician and researcher with over 16 years of teaching experience in the field of Electronics and Communication Engineering. Currently, I serve as an Associate Professor at Dr. K. V. Subba Reddy Institute of Technology, Kurnool.

I earned my **Ph.D. in VLSI** from *Sri Krishnadevaraya University, Anantha Puram*, and hold an **MTech in VLSI System Design**. My teaching philosophy centres on fostering **critical thinking, innovation, teamwork, and practical learning**, enabling students to bridge theoretical knowledge with real-world applications.

In addition to my academic responsibilities, I have taken on several leadership roles within the institution. I have contributed significantly to the successful execution of **NAAC**, **NBA**, **and IQAC** activities, and have efficiently managed **Library**, **CSP**, and **BCDE** functions. Through these roles, I have demonstrated strong organizational and collaborative skills aimed at enhancing institutional quality and academic excellence.

Over the years, I have guided numerous **undergraduate and postgraduate students** in their academic and research projects, nurturing their technical and analytical capabilities.

My research interests include VLSI Design and Internet of Things (IoT), areas that align with current technological trends and industry advancements. I am passionate about leveraging these domains to contribute to academic growth, innovative research, and institutional development.

Qualification

| Year | Qualification | Institution |
|------|-----------------------------|---|
| 2020 | Ph.D. (VLSI) | Sri Krishnadevaraya University, Ananthapuram |
| 2012 | M.Tech (VLSI System Design) | TKRCET (Autonomous), Hyderabad (JNTUH) |
| 2006 | B.Tech (ECE) | St. John College of Engineering, Kurnool |
| 2001 | Diploma (ECE) | Government Polytechnic, Kurnool |

| Year | Qualification | Institution |
|------|---------------|------------------------------|
| 1998 | SSC | Chinmaya Vidyalayam, Kurnool |

Experience

| Institution | Designation | Duration |
|--|---------------------|------------------|
| Dr. K. V. Subba Reddy Institute of Technology, Kurnool | Associate Professor | 2025 – Till Date |
| SVR Engineering College, Nandyal | Associate Professor | 2020 – 2024 |
| B.I.T.S, Kurnool | Assistant Professor | 2013 – 2020 |
| B.I.T.S, Adoni | Assistant Professor | 2011 – 2013 |
| N.I.E.T, Hyderabad | Assistant Professor | 2006 – 2008 |

Awards / Achievements

- Recognized for exceptional contributions as NAAC and NBA Coordinator, driving institutional quality initiatives.
- Acted as reviewer for several reputable national and international journals.

Responsibilities

Administrative Responsibilities - NAAC Coordinator

- NBA Coordinator
- IQAC Coordinator
- Library In-Charge
- CSP Coordinator
- BCDE Coordinator

Academic Responsibilities -

Teaching core courses in Electronics and Communication Engineering.

- Mentoring and guiding undergraduate and postgraduate students.
- Driving continuous research and development activities.

Teaching

Expertise / Subjects Handled - VLSI Design

- Digital Electronics & Logic Design
- Internet of Things (IoT)
- Artificial Intelligence and Machine Learning
- Data Science Fundamentals

- Embedded Systems Design
- Digital Signal Processing
- Image Processing

Research

Research Interests - VLSI System Design and Architecture

- FPGA-based Image Processing

Publications

International Journals

List of Publications

- 1. "Real Time Application of Effective Segmentation based on Triclass Thresholding", International Research Journal of Engineering and Technology (IRJET), Volume 03, Issue 03, March 2016, ISSN: 2395-0056.
- 2. "A New Iterative Triclass Thresholding Technique for Image Segmentation", International Journal of Modern Electronics and Communication Engineering (IJMECE), Volume 4, Issue 2, March 2016, ISSN: 2321-2152.
- 3. "Settled Graph Cut for Automatic Segmentation of High-Frequency Ultrasound Images of the Mouse Embryo", International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET), Volume 4, Issue 4, 2018.
- 4. "Image Contrast Enhancement Using Arty-7 FPGA for Real-Time Image Processing", *Solid State Technology*, Volume 63, Issue 6, 2020.
- 5. "Image Enhancement Using Histogram Equalization", *The Mattingley Publishing Co., Inc.*, January–February 2020, ISSN: 0193-4120.
- 6. **"FPGA Implementation for Image Enhancement Using Zynq-7020"**, *Turkish Journal of Computer and Mathematics Education*, Volume 12, No. 10, 2021.
- 7. "Innovative Line Following Recliner for Seers Paralyzed Patient", Journal of Resource Management and Technology.
- 8. "Design and Development of Pre-Paid Electricity Billing for Agriculture by Farmers", Design Engineering.
- 9. "Online Wavelets Transform on a Xilinx FPGA Circuit to Medical Images Compression", International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET), Volume 2, Issue 2, 2016.

- 10. "Modified Adaptive Gamma Correction Algorithms Model for Image Contrast Enhancement Using Xilinx System Generator", International Journal of Recent Trends in Engineering & Research (IJRTER), ISSN: 2455-1457, Impact Factor: 4.101.
- 11. "Implementation of Multi-Channel Symmetric Systolic FIR Filter Architectures for High-Performance DSP Applications", *Material Science and Technology*, Volume 22, No. 08, August 2023.
- 12. "Real-Time Observations of Environment Using Texas Instruments' Sensor Tag CC2650", Design Engineering, Issue 06, 2021.
- 13. "Malicious Free Biometric Digital Transaction System", Design Engineering, Issue 07, 2021.
- 14. "Implementation of a High-Performance 2-Bit Magnitude Comparator Using Gate Diffusion Input Logic", *Journal of Resource Management and Technology*, Volume 12, Issue 4, 2021.
- 15. "Adaptive Leaf Abnormality Segmentation and Improved Plant Disease Classification by Tuned Long Short-Term Memory with Recurrent Neural Network", Concurrency and Computation: Practice and Experience, 2022.
- 16. "Real-Time Image Processing Using Modified Linear Piecewise Transformation Implemented in FPGA Using Xilinx System Generator", International Journal for Research in Engineering Application & Management (IJREAM), December 2020.
- 17. "Cryptography Using Contrast Enhancement", International Journal of Scientific Research in Science and Technology (IJSRST), Volume 4, Issue 5, 2018.

FDPs / Workshops / Webinars Attended

A Five Day National Level Workshop on "SILICON TO SYSTEM DESIGN" (GPREC, Kurnool, August 2023)

- Online Elementary FDP on "Recent Advances in VLSI Design and System" (ATAL, Dharmsinh Desai University, Nov 2021)
- Online Elementary FDP on "Internet of Things" (ATAL, Sree Vidyanikethan Engineering College, Oct 2021)
- One Week Online FDP on "Python Programming and Its Applications" (G. Pulla Reddy Engineering College, Kurnool, Sep 2022)
- Workshop on "PEDAGOGY TO DEVELOP QUALITY INITIATIVES: A STUDENT-CENTRIC LEARNING" (KVSR Siddhartha College, Vijayawada, Aug 2022)
- One Day National Level Webinar on "RESEARCH METHODOLOGY" (St. Joseph University, Nagaland, Apr 2022)

- International Webinar on "Artificial Soft Electronic Skin for Health care Application" (Chaitanya University, Mar 2022)
- National Level E-Quiz on "Antenna and Propagation" (Lords Institute of Engineering & Technology, Jun 2021)
- One Week Online FDP on "Artificial Intelligence for IoT Services in Cloud: Techniques & Applications" (NIT Jalandhar, Feb-Mar 2022)
- One Week Online FDP on "Emerging Trends in VLSI Design & Practical Approach" (Aditya College of Engineering, Madanapalle, Aug 2022)
- One Week National Level Online FDP on "Smart Grids and Micro Grids in Indian Context" (Mahatma Gandhi Institute of Technology, Hyderabad, Jun 2022)
- Six Days National Level Webinar Series on "Graphics and Algorithms" (SIMATS School of Engineering, Chennai, May 2022)
- Two Day FDP on "Recent Trends in Artificial Intelligence" (Chaitanya University, Aug 2022)
- One Day International Webinar on "Novel Materials and Characterization for Technological Applications" (Pithapur Rajah's Government College, Kakinada, Dec 2020)
- FDP on "Design of Nanoelectronics and Nanophotonic Devices Using Advanced Software Tools" (GITA Autonomous College, Bhubaneswar, May 2021)
- Two Week International Online FDP on "Latest Technological Developments in Electronics and Communication Engineering" (KL Deemed to be University, Oct 2020)
- AICTE-ISTE Refresher Program on "Future Wireless Communication: Standards & Technologies" (K.S. Institute of Technology, Bengaluru, May 2021)
- FDP on "Physical Layer Techniques for 5G Technology" (Narayana Engineering College, Gudur, Jul 2021)
- One Day Online Seminar on "How to Publish an Academic Book" (Gates Institute of Technology, Jun 2022)
- One Day Online FDP on "Calculation of Academic performance Indicator (API)" (Santhiram Engineering College, Nandyal, Mar 2021)
- One Day National Level Workshop on "Outcome Based Education" (Siddhartha Institute of Engineering & Technology, May 2021)
- Two Day Online FDP on "MATLAB" (St. John's College of Engineering & Technology, Yemmiganur, Jun 2021)
- AICTE STTP on "Medical Image Processing & It's Applications in Automated Disease Detection" (St. Martin's Engineering College, May 2021)

- AICTE STTP on "Next Generation Wireless Technologies: 5G and beyond" (Indo Global College of Engineering, Jul 2021)
- FDP on "DIGITAL DESIGN THROUGH VERILOG HDL" (SVR Engineering College, Nandyal, Jun 2021)
- One Week Online FDP on "Wireless Sensor Network Simulation Using NS2" (Vardhaman College of Engineering, Hyderabad, May 2021)

NPTEL Certifications

- Introduction to Machine Learning NPTEL Online Certification
- Computer Networks and Internet Protocol NPTEL Online Certification
- Introduction to Internet of Things NPTEL Online Certification

Memberships

- Life Member, The Institution of Electronics and Telecommunication Engineers (IETE)
- Life Member, Indian Society for Technical Education (ISTE)

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https://scholar.google.com/citations?user=fAYBbogAAAAJ&hl=en

Contact:

Dr. M. M. Raghavendra

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