K.Sudha Rani
Associate Professor, TKRCET
B.TECH, M.TECH(Ph.D)
ELECTRONICS & COMMUNICATION ENGINEERING

Areas of Interest
1. Image Processing
2. Signal Processing
3. Embedded Systems

Educational & Professional- Academic Qualifications:

-Pursuing Ph.D in the area of Computer Vision & Image Processing, GITAM University,Vishakapatnam.

-M.Tech in Embedded Systems , CMR College of Engineering and Technology, JNTUH (2008-2010)

-B.Tech in Electronics and Instrumentation Engineering ,Jyothismathi Institute of Technology and Sciences,Karimnagar ,JNTU(2001- 2005)

Professional Experience:

- Associate Professor, TKR College of Engineering and Technology, Hyderabad (2007 - Till Date)

Publications:

1. Published paper In National Conference 2010,Context Based Modeling For Hierarchical Arial Images at MGR University ,Chennai
2. International Journal of Science, Engineering and Technology Research,Design and Analysis on Single bit to Multi Flip Flop Vol. 03,Issue 24, January 2014
3. International Journal of Science, Engineering and Technology Research,A Novel Approach For Parallel CRC Generation For High Speed Application Vol. 02,Issue 11, January 2015
4. International Journal of Eminent Engineering Technologies,VLSI Architecture For Exploitation Carry-Save Arithmetic Using VerilogHDL Vol. 04,Issue 03,September 2016
5. International Journal of Research,Design and Analysis of Fault tolerant Parallel FFTs based on error correction codes and Parseval checks,Vol. 05,Issue 01, January 2018
6. K.Sudha Rani, Dr. D.Nageshwar Rao,A Comparative Study of Various Noise Removal Techniques Using Filters, Research & Reviews: Journal of Engineering and Technology, e-ISSN: 2319-9873,Vol. 07 Issue 2,June 2018.

FDP's Attended:

1. Participated in **AICTE** Sponsored two week National Level Faculty Development Programme on "Speech, Image and Video Processing Techniques, Analysis and Applications" at Malla Reddy Engineering College for Women from 6th to 18th November, 2017.
2. Participated in one week Faculty Development Programme on "Design of Experiments using Taguchi Approach" at TKR Engineering College for Women from 12th to 17th November, 2018.
3. Participated in one week Faculty Development Programme on "Linear Regression,GPCA,SVD,SVM,Linear Discriminant Analysis and Wavelets MRA-Research Focus" conducted during 17th to 22nd December, 2018 in association with IEEE CMRTC.
4. Participated in **AICTE** Sponsored Faculty Development Programme on "Artificial Neural Networks and Deep Learning " from 4th to 8th November, 2019 at JNT University Hyderabad.

Workshops:

- Attended workshop on "Arm Based Embedded Processing",2015.
- Attended training program on "Data Networking Routing & Switching",2015.
- Attended workshop on "Embedded Systems And Robotics",2016.
- Attended workshop on "PCB design and fabrication", 2017.
- Attended workshop on "Home Automation with IoT using Raspberry Pi",2017.
- Attended workshop on "Introduction to Python",2017.
- Attended 3-day Workshop on "IOT & Data Analytics with AI",2018.

Subjects Handled (in UG level):

- Electronic Circuit Analysis(ECA)
- Switching Theory & Logic Design(STLD)
- Signals & Systems(SS)
- Linear IC Applications(LICA)
- Digital Signal Processing(DSP)
- Microprocessors & Microcontrollers(MPMC)
- Electronic Measurements & Instrumentation(EMI)
- Digital Image Processing(DIP)
- Embedded Systems (ES)

Subjects Handled (in PG level):

- Embedded & Real Time Systems (ERTS)
- System On Chip Architecture(SoCA)
- Complex Programmable Logic Devices & Field Programmable Gate Array Architectures(CPLD &FPGA)

Project/Research Guidance :

Student Name	Title	Year
B.Padma	Flexible Hardware Architecture Of Hierarchical K-Means Clustering for Large Cluster Number	2012
A.Rohan Karthik	Design And Development Of An Embedded System For Multiprotocol Data Transfer Unit	2013
S.Sai Babu	Design and Analysis on Single bit to Multi Flip Flop	2014
P.Ramana Reddy	Black Box Implementation for Automobiles	2014
S.Naresh	A Novel Approach For Parallel CRC Generation For High Speed Application	2015
G.Harsha	VLSI Architecture For Exploitation Carry-Save Arithmetic Using VerilogHDL	2016
Rahul.D	Accident Prevention Using Eye Blink Sensor	2017
P.Paramesh	Dynamic Bit Width Adaption Technique in Image Compression System	2018
G.Abhinay Reddy	Hand Gesture Controlled Robotic Arm	2018