



# ANNAMACHARYA UNIVERSITY

EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY  
(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)  
Rajampet, Annamayya District, A.P – 516126, INDIA

## Faculty Profile

### Basic Information:

NAME : Dr. Shaik Karimullah  
DESIGNATION : Assistant Professor  
DEPARTMENT : ECE  
DATE OF BIRTH : 21-05-1988  
DATE OF JOINING : 15-06-2012  
EMAIL ID : skr@aitarajampet.ac.in  
EMPLOYEE ID : 422



### Academic Profile:

Qualification	Name of the Board/University	YEAR
Ph. D.	Jawaharlal Nehru Technological University, Anantapur.	2022
M. Tech	Madina Engineering College, Kadapa.	2011
B. Tech	Mekapati Rajamohan Reddy Institute of Technology and Sciences, Udayagiri.	2009

### Research Details:

1. Areas of Specialization	:	VLSI System Design, Machine Learning & AI
2. No. of Publications	:	65
3. Awards Received	:	00
4. Research Guidance		
	No. of PhD Guided :	04 (Guiding)
	No. of M.Tech. Guided :	05
	No. of B.Tech. Guided :	20
5. Details of Professional Membership:		Member-IEI Life Member-ISTE



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6. Subjects Taught :	<b>UG Level:</b> Electronic Devices and Circuits Digital Design VLSI Design Digital IC Applications Analog IC Applications Cellular and Mobile Communications Microwave Engineering Analog Communications Digital Communications <b>PG Level:</b> Digital IC Design Analog IC Design Low Power VLSI Design ASIC Design
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## Publication Details:

Title	Publisher	Published Year
An integrated method for detecting lung cancer via CT scanning via optimization, deep learning, and IoT data transmission	Frontiers in Oncology	2024
Advanced Brain Tumor Diagnosis using Haralick Texture Features and Multiclass SVM in MRI Imaging	IEEE (AQTR Conference, Romania)	2024
An Improved Harmony Search Approach for Block Placement for VLSI Design Automation	Wireless Communications and Mobile Computing (Hindawi)	2022
Pin Density Technique for Congestion Estimation and Reduction of Optimized Design during Placement and Routing	Applied Nanoscience (Springer)	2021
An Improved Harmony Search Approach for Block Placement for VLSI Design Automation	Wireless Personal Communications (Springer)	2022
Deep learning-based congestion control in VLSI for placement and routing	Journal of Theoretical and Applied Information Technology	2024
Integrated Deep Learning Methodology for Early Glaucoma Detection and Diagnosis using Retinal Fundus Images	IEEE (ACROSET Conference, India)	2024
Incorporating Grey Wolf Optimization and Recurrent Neural Networks for Accurate Brain Tumor Detection	IEEE (ACROSET Conference, India)	2024
Exploring Diabetic Retinopathy Diagnosis: Insights from Literature Review and Initial Fundus Image Analysis	IEEE (ICEECT Conference, India)	2024
Integrated Methodology for Early Glaucoma Diagnosis Using Retinal Fundus Images	IEEE (ICEECT Conference, India)	2024



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Cardiovascular disease diagnosis using machine learning techniques	CRC Press (Book Chapter)	2024
Automated Glaucoma Detection and Classification via Deep Neural Networks and Feature Extraction	IEEE (ICECCC Conference, Bengaluru)	2024
Extreme Learning Machine (ELM) Algorithm for the Detection of Diabetic Retinopathy	IEEE (ICECCC Conference, Bengaluru)	2024
Integrated ResNet Model for Efficient Automated Assessment and Sorting of Leaf Diseases in Agriculture	IEEE (ICECCC Conference, Bengaluru)	2024
Emotion Recognition from Physiological Signals Using Ensembled Machine Learning Strategy	IEEE (ICECCC Conference, Bengaluru)	2024
A Sparse Code Multiple Access for 5G Radio transmission	Lecture Notes in Electrical Engineering (Springer)	2024
An Enhanced Woelfel Image Noise Filter	Studies in Computational Intelligence (Springer)	2024
PAPR and SER Performance Analysis of OFDMA and SCFDMA	Springer Nature (Book Chapter)	2024
Facemask Detection Using Bounding Box Algorithm Under COVID-19 Circumstances	Springer Nature (Book Chapter)	2024
Optimization of Area and Wirelength Using Hybrid BPSO Algorithm in VLSI Floorplan and Placement for IC Design	Springer Nature (Book Chapter)	2024
Performance Evaluation of GA, HS, PSO Algorithms for Optimizing Area, Wirelength Using MCNC Architectures	Springer Nature (Book Chapter)	2024
Improved Spectral Efficiency Using Vehicular Visible Light Communication with 16-Bit DCO in OFDM	Springer Nature (Book Chapter)	2024
A Sparse Code Multiple Access for 5G Radio transmission	Lecture Notes in Electrical Engineering (Springer)	2024
Spectral Efficiency for Multi-bit and Blind Medium Estimation of DCO-OFDM Used Vehicular Visible Light Communication	Lecture Notes in Electrical Engineering (Springer)	2023
Performance Enhancement of Wireless Systems Using Hybrid RIS Technique	Lecture Notes in Electrical Engineering (Springer)	2023
Performance Enhancement of Wireless Systems Using Hybrid RIS Technique	Lecture Notes in Electrical Engineering (Springer)	2023



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VIP Development of SPI Controller for Open-Power Processor-Based Fabless SOC	Lecture Notes in Electrical Engineering (Springer)	2023
Low Power Enhanced Leach Protocol to Extend WSN Lifespan	Lecture Notes in Electrical Engineering (Springer)	2020
A Genetic Algorithm with Fixed Open Approach for Placements and Routings	Lecture Notes in Electrical Engineering (Springer)	2020
Iterative Analysis of Optimization Algorithms for Placement and Routing in ASIC Design	Lecture Notes in Electrical Engineering (Springer)	2020
Floor planning for Placement of Modules in VLSI Physical Design Using Harmony Search Technique	Lecture Notes in Electrical Engineering (Springer)	2020
Design and Implementation of Novel 4-Bit ALU	Lecture Notes in Electrical Engineering (Springer)	2020
Experimental Analysis of Optimization Techniques for Placement and Routing in ASIC Design	Lecture Notes in Electrical Engineering (Springer)	2020
Deep learning-based congestion control in VLSI for placement and routing	Journal of Theoretical and Applied Information Technology	2024
Integrated Deep Learning Methodology for Early Glaucoma Detection and Diagnosis using Retinal Fundus Images	IEEE (ACROSET Conference, India)	2024
Incorporating Grey Wolf Optimization and Recurrent Neural Networks for Accurate Brain Tumor Detection	IEEE (ACROSET Conference, India)	2024
Exploring Diabetic Retinopathy Diagnosis: Insights from Literature Review and Initial Fundus Image Analysis	IEEE (ICEECT Conference, India)	2024
Integrated Methodology for Early Glaucoma Diagnosis Using Retinal Fundus Images	IEEE (ICEECT Conference, India)	2024
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## Patent Details:

Title of Patent	Submitted/Published/Awarded
Method for Improving Machine Learning Model Performance with Generative Adversarial Networks	Published
Method for Improving Machine Learning Model Performance with Generative Adversarial Networks	Published
VLSI Layout Using Redundant Nodes to Increase the Reliability	Published
A Machine Learning Based System for Physical Attack Protection for VLSI Chip Level Hardware Security and Method Thereof	Published
A System for Super Large-Scale Integration VLSI Method Thereof	Published
A Cloud Computing System for Optimizing Virtual Machine Placement and Configuration and Method Thereof	Published
A Novel Method and System for Designing VLSI Circuitry to Optimize the Integrated Circuit Operation	Published
A Novel Method of Power Reduction in Modified AES using Bit Encryption and Decryption Transition Scheme on FPGA	Published
A Novel Method of Design of Low Power VLSI Based Viterbi Decoder using Gate Diffusion Input	Published
Computer Implemented Method and System for Processing Qualitative Imaging to Detect and Forecast Abnormalities	Published
Computer Implemented System for Optimizing Placement and Routing in Very Large-Scale Integrated Circuit Design	Published