Faculty Profile



Dr. Shanty Chacko

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Academic Background

Degree	Branch	University	Year	
Ph.D	Electronics and Communication	Karunya University,	2014	
	Engineering	Coimbatore		
M.E.	Applied Electronics	Bharathiar University	2002	
B.E	Electrical and Electronics Engineering	Mangalore University	1991	

Professional Experience

Name & address of the		Period of service			
Institution/ Organization	Post held	From	То		
Karunya Institute of Technology and Sciences (A Deemed	Assistant Professor (AGP 8000)	1 st Jan 2009	Till Date		
University), Karunya Nagar,	Senior Lecturer	1 st Mar 2004	I st Jan 2009		
Coimbatore	Lecturer	1 st Aug 1997	28 th Feb 2004		
Total Experience = 25 Years, 5 Months					

Research Areas

- Digital Image Processing
- Pattern Recognition

- Signal Processing
- Medical Signal Analysis

Recent Courses Taught

- Digital Signal Processing
- Digital Electronics

- Digital Image Processing
- Electro Magnetic Fields

- Control Systems
- Machine Learning
- Electric Circuit Analysis
- Signals and Systems
- Linear Integrated Circuits
- Power Electronics
- Switch Gear and Protection

- Electrical Machines
- Special Electrical Machines
- Renewable Energy Resources for Health Care
- Microprocessors and Micro Controllers
- Network Analysis and Synthesis
- Electron Devices
- HVDC Transmission

Responsibilities Held

- EEE Department Library in Charge
- Mentor for various EEE batches.
- EEE Budget Coordinator

Membership in Professional Societies

• Life Member ISTE (India Society for Technical Education) - LM108318

Academic Performance Index

• Publications in Scopus Indexed International Journals	- 17
• Publications in SCI Indexed International Journals	- 6
• Publications in Scopus Indexed International Conferences	- 6
• Participation in FDP / Workshops / STTP / Seminars / Guest Lectures	- 25
• Ph.D. Guided (Completed)	- 1
Ph.D Guiding	- 6
• M.E / M.Tech. Project Guided	- 16
 Book Chapters published 	- 1

Recent Scopus Publications:

- 1. Chacko A. Chacko S., "Deep Learning based robust medical image watermarking exploiting DCT and Harris Hawks optimization", International Journal of Intelligent Systems, 2022, 37(8), pp. 4810-4844.
- 2. Chacko S., et. Al, "Identification of Power Leakage and Protection of", International Journal of Electrical and Electronics Research, 2022, Vo. 10 (3), pp. 529-535.
- Chacko S. et. Al, "Liver Tumor Classification Using Optimal Opposition Based Grey Wolf optimization", International Journal of Pattern Recognition and Pattern Recognition and Artificial Intelligence, 2022, 2240005

3. Chacko S., et. Al, "Regression based Predictive Machine Learning Model for Pervasive Data Analysis in Power Systems", International Journal of Electrical and Electronics Research -, 2022, 10(3), pp. 550 – 556.

4. Chacko S., 'Liver cancer detection based on various sustainable segmentation techniques for CT images'. International Journal of Environmental Technology and Management, 2022, 25(3), pp.166-179.

5.. Chacko S. 'FPGA based implementation of floating point processing elementfor the design of efficient fir filters', IET Computers and Digital Techniques, 2021,15(4), pp.296-301.

6. Chacko S. et.Al, 'A modified capsule network algorithm for oct corneal image segmentation', Pattern Recognition Letters, 2021, 143, pp.104-112.

7. Chacko S. et.Al, 'Conceptual implementation of Artificial Intelligent based E-mobility Controller in Smart City Environment', Wireless Communication and Mobile Computing, 2021, 5325116.

8. Chacko S. et.Al, 'Sustainable Analysis of liver tumour detection using various segmentation techniques', World Review of Science Technology and Sustainable Development, 2021, 17(2-3), pp.236-247.

9. Chacko S. et.Al, 'Classification of noiseless corneal image using capsule network', Soft Computing, 2020, 24(21), pp.16201-16211.

10. Chacko S. et.Al, 'Efficient VLSI architecture for FIR Filter Design using modified differential evolution ant colony optimization algorithm', Circuit World, 2020, 47(3), pp.243-251.

11. Chacko S. et.Al, ' A review on cornea imaging and processing techniques', Current Medical Imaging Reviews, 2020,16(3), pp.181-192