

Thiagarajar College of Engineering, Madurai-625015
Department of Electronics and Communication Engineering



Name of the Supervisor	Name of the scholar	Research Area	Title of research	Status (Completed/Ongoing)
Dr.V.Abhaikumar	Salivaghanan	Radio Frequency	Microwave Integrated Circuits	Completed
Dr.V.Abhaikumar	S.Rajmohan	Image Processing	Environmental Remote Sensing	Completed
Dr.V.Abhaikumar	S..J.Tiruvengadam	Digital Signal Processing	Multiuser Detection	Completed
Dr.V.Abhaikumar	S.Rajaram	VLSI	Studies on system configurable Architectures for Emerging wireless communication.	Completed
Dr.V.Abhaikumar	S.Md.Mansoor Roomi	Image Processing	Studies on Image Enhancement Issues	Completed
Dr.V.Abhaikumar	R.A.Alaguraja	Image Processing	Class of change detection techniques for remote sensing applications	Completed
Dr.V.Abhaikumar	M.S.K.Manikandan	Networks	Chaos based wireless communication system	Completed
Dr.V.Abhaikumar	K.Hariharan	Embedded Systems	Embedded system	Completed
Dr.S.Raju	N.Suresh Kumar	Radio Frequency	EMI/EMC	Completed
Dr.S.Raju	A.Banumathi	Image Processing	Dental Imaging	Completed
Dr.S.Raju	Manimegalai	Radio Frequency	Reconfigurable Antenna	Completed
Dr.S.Raju	Kanthamani	Radio Frequency	MEMS Switches	Completed
Dr.S.Raju	A.Thenmozhi	Radio Frequency	Tunable Filters	Completed
Dr.S.Raju	B.Yogameena	Image Processing	Computer vision based algorithms for Human Action analysis for Video Surveillance Applications	Completed
Dr.S.Raju	K.Annaram	Radio Frequency	MEMS Mixer	Completed
Dr.M.Suganti	A. Albert Raj	Networks	FPGA implementation of Routing Filter	Completed
Dr.M.Suganti	S. Sasi Kumar	Networks	Detection and Estimation of quantum based projected orthogonal receiver system	Completed
Dr.M.Suganti	S. Sophia	Networks	A novel method for front end SDR Receiver	Completed
Dr.M.Suganti	A. Allirani	Networks	Cluster in sensor Networks	Completed
Dr.M.Suganti	C. Geetha Priya	Networks	PAPR Reduction in OFDM Networks	Completed
Dr.M.Suganti	P.C. Kishore Raja	Networks	Wireless mode behaviour based Intrusion detection using genetic algorithm	Completed
Dr.M.Suganti	T. Aruna	Networks	Performance Enhancement of MANETS with cross layer Design	Completed
Dr.R.Sukanesh	Harikumar	Medical Electronics	Bio-Medical Engineering	Completed
Dr.R.Sukanesh	Sudha	Medical Electronics	Medical Imaging	Completed
Dr.R.Sukanesh	G.R.Suresh	Medical Electronics	Medical Imaging	Completed
Dr.R.Sukanesh	Vijayarengan	Networks	Wireless Communication	Completed

Dr.R.Sukanesh	P.Venkatakrisnan	Medical Electronics	EEG-Data Compressions	Completed
Dr.R.Sukanesh	Bhuvaneshwari	Networks	Neural Networks	Completed
Dr.R.Sukanesh	HyderAli	Medical Electronics	Image Compression	Completed
Dr. S.J. Thiruvengadam	J. Jenifer Ranjani	Digital Signal Processing	Development and Analysis of Wavelet Based Speckle Reduction Algorithms for Synthetic Aperture RADAR images	Completed
Dr.S.Raju	B.SathyaBama	Image Processing	Geometric and Photometric Invariant Texture Analysis	Completed
Dr.V.Abhaikumar	M.N.Suresh	Digital Signal Processing	Timing and Frequency Offset Estimation in OFDM and Multiband OFDM systems	Completed
Dr. S.J. Thiruvengadam	Premkumar	Digital Signal Processing	Channel Estimation and Performance Analysis for Amplify and Forward Wireless Relay Networks	Completed
Dr.R.Sukanesh	SundaraGuru	Networks	OFDM Systems	Completed
Dr.R.Sukanesh	Sivanesh Kumar	Networks	Performance of MC-CDMA system under clipping noise	Completed
Dr.R.Sukanesh	P.N.Jayarani Sarkunar	Medical Electronics	Medical Image Processing	Completed
Dr.R.Sukanesh	T.S.Jeyali Laseetha	Networks	Antenna Beamforming	Completed
Dr. S.J. Thiruvengadam	G. Ananthi	Digital Signal Processing	MIMO ad-hoc networks	Completed
Dr.M.Suganti	G.S.R. Emi Selvan	Networks	Routing in MANETS	Completed
Dr.M.Suganti	R. Suresh Babu	Networks	Spectrum Sensing and Spectrum Management in Space Time Block Coded-OFDM Based Cognitive System	Completed
Dr. S.J. Thiruvengadam	A.Merline	Digital Signal Processing	Design of Power Allocation Algorithms for Multiple Antenna Systems with Peak and Sum Power Constraints	Completed
Dr. S.Rajaram	B.Sri Devi	VLSI	Development of Algorithms for Security Enhancement and Authentication Cost Reduction for Mobile WIMAX	Completed
Dr. S.Rajaram	D.GraciaNirmala Rani	VLSI	Analysis and Optimization of Floor Planning Algorithms for VLSI Physical Design	Completed
Dr.R.Sukanesh	A.Padma	Networks	Certain Investigations on Texture Analysis Techniques for Segmentation and Classification of Brain Images	Completed
Dr.R.Sukanesh	R.Bharathi	Networks	Investigations on Defence Approaches for DDOS attacks	Completed
Dr.S.Rajaram	K.Kalyani	VLSI	Design and Implementation of efficient Reconfigurable Architectures for Long term	Completed

			Evaluation Wireless standards	
Dr. N.B. Balamurugan	T.S. Arun Samuel	VLSI	Analytical modelling and simulation of DG TFET'S	Completed
Dr. N.B. Balamurugan	P. Vimala	VLSI	Analytical Modelling and simulation of Quantum mechanical Effects in DG MOSFETs	Completed
Dr.S.Rajaram	R.Suganya	VLSI	Classification and Retrieval of Ultrasound Liver Images using Machine Learning Techniques	Completed
Dr. N.B. Balamurugan	P. Suveetha Dhanaselvam	VLSI	Analytical Modelling and simulation of Fully Depleted Triple Material Surrounding Gate MOSFETS Considering Short Channel Effects	Completed
Dr. S. Mohamed MansoorRoomi	P. Vasuki	VLSI	Development of Automatic Target Recognition Techniques for Synthetic Aperture RADAR Images	Completed
Dr.S.Rajaram	R.Deepalakshmi	VLSI	Design and hardware implementations of MAC/routing Algorithm for optical networks	Completed
Dr. A. Banumathi	B. Vijayakumari	Image Processing	Identification of Victim in Forensic Dentistry from Dental Images	Completed
Dr. S.J. Thiruvengadam	V.N. SenthilKumaran	Digital Signal Processing	Bidirectional Relay Network	Completed
Dr.M.Suganthi	R.Manjith	Networks	PAPR Reduction and Pilot Symbol Assisted Channel Estimation for MIMO-OFDM and Cognitive System	Completed
Dr. S.J. Thiruvengadam	S.SyedAmeer Abbas	Digital Signal Processing	Design and FPGA Implementation of Novel Receiver Structures for LTE Physical Downlink Control Channels	Completed
Dr.S.Rajaram	A.Babu karuppiyah	VLSI	Development of Low Power Algorithms for Intrusion Detection in Wireless Sensor Networks	Completed
Dr.S.Rajaram	V.R.Venkatasubramani	VLSI	Design and FPGA Implementation of Elliptic curve Cryptographic Processor	Completed
Dr. S.J. Thiruvengadam	K. Rajeswari	Digital Signal Processing	Channel Estimation in Multiple Antenna Wireless Systems with Transmit Antenna Selection	Completed
Dr.R.Sukanesh	N.Karthikeyan	Medical Electronics	Investigations on Deployment of Distributed Computing for Health Care	Completed
Dr.N.B.Balamurugan	M. Karthigai Pandian	VLSI	Analytical Modeling and Simulation of Advanced Surrounding Gate Silicon Nanowire Transistors	Completed
Dr.S.Rajaram	S.Sridevi	VLSI	Analysis of Forecasting Methods for Time Series Data using Quantitative Approaches	Completed

Dr.S.Raju	P.Jothilakshmi	VLSI	Design and Analysis of a Class of Continuous Transverse Stub Array Antenna for Microwave Applications	Completed
Dr. S.J. Thiruvengadam	P.G.S. Velmurugan	Digital Signal Processing	Radio resource management in cognitive dynamic systems	Ongoing
Dr. S.J. Thiruvengadam	RajKumar	Digital Signal Processing	Performance Analysis of OFDM Based Cooperative Cognitive Radio network in the Presence of Narrow Band Interference	Completed
Dr. N.B. Balamurugan	L. Sheela	VLSI	Analysis and Simulation of Single Electron Transistors	Completed
Dr. N.B. Balamurugan	D. Saraswathi	VLSI	Analytical , modelling and simulation of novel multigate nano scale SOI MOSFETS	Ongoing
Dr.R.Sukanesh	R.K.Jeyachitra	Communication	Performance Analysis in Wireless Communication	Ongoing
Dr.R.Sukanesh	S.Bharathi	Communication	Performance Analysis in Wireless Communication	Ongoing
Dr.S.Rajaram	V.VinothThyagarajan	VLSI	Low power VLSI circuits	Ongoing
Dr.M.Suganti	S.K.A.Ahamed kandu sahib	Networks	Processing , Characterisation and Hysterisis studies of nano-ferrite materials for the application of EM wave sensor	Ongoing
Dr.V.Abhaikumar	R.Senthil Kumar	Radio Frequency	Design and Devolepment of novel Wireless anetennas	Ongoing
Dr.S.Raju	K.Vasudevan	Radio Frequency	Studies on Interfrenc and crosstalk effects in high speed Digital systems	Ongoing
Dr. S.J. Thiruvengadam	E.Murugavalli	Digital Signal Processing	Signal processing techniques to Improve energy efficiency in WSN	Ongoing
Dr.S.Rajaram	G.NallaThambi	VLSI	A Knowledge based Routing expert	Ongoing
Dr.S.Raju	P.Rajeswari	VLSI	Evolutionary optimization technique for high speed VLSI Inteconnects	Ongoing
Dr. N.B. Balamurugan	L. Sheela	VLSI	Parameter Extraction of semi-conductor devices using Memtic algorithm	Ongoing
Dr. N.B. Balamurugan	S. Theodore Chandra	VLSI	Analytical modelling and simulation of silicon nano wire transistors	Ongoing
Dr. S.J. Thiruvengadam	C. Jeyamala	Digital Signal Processing	Image Encryption	Ongoing
Dr. S. Mohamed MansoorRoomi	Anna lakshmi	Image Processing	Digital Image processing	Ongoing

Dr. S. Mohamed MansoorRoomi	Sivaranjani	Image Processing	Devolpement of novel automatic target reduction algorithms for SAR images	Ongoing
Dr. A. Banumathi	SahulHameed K.A	Image Processing	Diagnosis of oral Cancer using medical Image analysis	Ongoing
Dr. A. Banumathi	R. Karthika Devi	Image Processing	Automated Diagnostic system for Dental Diseases using Image processing	Ongoing
Dr. S. Mohamed MansoorRoomi	M.Jeganmohan	Image Processing	Medical Image categorization and classification	Ongoing
Dr. N.B. Balamurugan	M. Jothi	VLSI	Design and simulation of VLSI fuzzy Processor	Ongoing
Dr. S. Mohamed MansoorRoomi	M. ParisaBeham	Image Processing	Invariant Feature extraction for Holistic face recognition	Ongoing
Dr.V.Abhaikumar	C.Gokulnath	Radio Frequency	Modelling and analysis of MIMO antennas for wireless applications	Ongoing
Dr.M.Suganti	C.S. Karthikeyan	Networks	Wireless communications	Ongoing
Dr. B. Manimegalai	D. Helena Margaret	Radio Frequency	Development of EBG Based antenna using optimization techniques	Ongoing
Dr. A. Banumathi	M. Murugeswari	Image Processing	Magnification Error redution in pandamic X-ray images	Ongoing
Dr. A. Banumathi	M. Siva BalaSundari	Image Processing	Image processing	Ongoing
Dr.S.Raju	V.Mariselvam	Radio Frequency	Analysis and Modelling of Microwave active devices	Ongoing
Dr.M.Suganti	S.Senthilrani	Networks	An Efficient algorithm for Large scale gate sizing and interconnect optimization	Ongoing
Dr. S. Mohamed MansoorRoomi	G. Maragatham	Image Processing	Development of algorithms enhancement algorithms for digital images	Ongoing
Dr. MSK. Manikandan	Francis Antony Selvi	Networks	Low latency Energy efficient Reliable ad-hoc Networks	Ongoing
Dr. N.B. Balamurugan	I. Sheik Arafat	VLSI	Analytical modelling and simulation of symmetrical Double gate SOI-MOSFETs	Ongoing
Dr. B. Manimegalai	P. Gunapandian	Radio Frequency	Design , analysis , simulation and development of tera hertz antennas	Ongoing

Dr. B. Manimegalai	P. Krishnaveni	Radio Frequency	RF-Antenna –Design and development of antennas for healthcare applications	Ongoing
Dr. B. Yogameena	A. Shyamala	Image Processing	Realtime video surveillance with occlusion handling	Ongoing
Dr. B. Yogameena	S. KathirVadivel	Image Processing	Motion Image enhancement of LCDs	Ongoing
Dr.S. Kanthamani	K.Arunadevi	Radio Frequency	Design analysis and optimization of RF MEM based Reconfigurable Filters	Ongoing
Dr.S. Kanthamani	M.Samyuktha	Radio Frequency	Analysis , Modeling and Optimization of RF MEMS based switch	Ongoing
Dr. N.B. Balamurugan	P.Vanitha	VLSI	Tunnel field effect transistors	Ongoing
Dr. MSK. Manikandan	T. Sangeetha	Networks	Enhanced QoS Aware Routing and admission control for MANET	Ongoing
Dr. A. Thenmozhi	K. Revathi	Radio Frequency	Design and analysis of Low noise amplifier for Wireless application	Ongoing
Dr. S. Mohamed MansoorRoomi	M.Senthilarasi	Image Processing	Vision based classification and grading of agro products	Ongoing
Dr.M.Suganti	K.R.Shanthy	Networks	Spectrum Management in Cognitive Radio networks	Ongoing
Dr.B.Yogameena	B.Vijayalakshmi	Image Processing	Development of face recognition algorithm for video surveillance	Ongoing
Dr.L.R.Karlmarx	K.Annaraja	Embedded Systems	Performance Improvement of Transducer in wired/wireless networking	Ongoing
Dr. MSK. Manikandan	V.S.Janani	Networks	Key management in Manet	Ongoing
Dr.M.Suganti	N.Duraichy	Networks	MIMO wireless communication	Ongoing
Dr.M.Suganti	G.Pandeeswari	Networks	co-operative Spectrum Sensing in Radio networks	Ongoing
Dr. MSK. Manikandan	B.Muneeswari	Networks	Adhoc networks (MANET-Routing)	Ongoing
Dr. MSK. Manikandan	T.R.Vedhavathi	Networks	Secure Incentive Protocol with limited use of cryptography for multi-hop wireless networks	Ongoing
Dr.R.Sukanesh	S.Murugeswari	Medical Electronics	Investigation on retinal fundus image for detecting macular edema	Ongoing

Dr.R.Sukanesh	A.Kanmani	Networks	Cloud computing for Educational institutions	Ongoing
Dr.B.Yogameena	A.Ramachandran	Image Processing	Multicamera Video surveillance systems for human motion analysis	Ongoing
Dr.A.Thenmozhi	N.Mahalakshmi	Radio Frequency	Design and Analysis of microwave antenna for Medical applications using DGS structure	Ongoing
Dr. A Banumathi	R Vimala	Image Processing	Image processing based Diagnostic aid in management of abnormally position teeth	Ongoing
Dr.L.R.Karlmarx	R Saravana Ram	Embedded Systems	Runtime Reconfigurable FPGA	Ongoing
Dr.V.Abhaikumar	S.Deepak ram Prasad	Radio Frequency	Design and development of antennas for wireless applications	Ongoing
Dr.R.Sukanesh	E.Muthukumaran	Networks	A Novel non- invasive Diagnostic Approach based on correlation of nasal cycle rhythm with three radial pulses	Ongoing
Dr.R.Sukanesh	S.Palanivelrajan	Networks	Wireless Communication for Biomedical applications	Ongoing
Dr.R.Sukanesh	S.Vijayaprasad	Networks	Wireless sensors	Ongoing
Dr.M.Suganti	M. Bhuvana	Networks	Service Discovery in MANET	Ongoing
Dr. A. Thenmozhi	N.R.Indira	Radio Frequency	Meta material Antenna	Ongoing
Dr. B. Manimegalai	R.Nagakrishnan	Radio Frequency	Novel energy distribution Schemes for wireless sensor networks	Ongoing
Dr. B. Manimegalai	A.Periyanan	Radio Frequency	Medical Image Processing using VLSI Implementation	Ongoing
Dr.L.R.Karlmarx	J.Mohamed Ilyash	Embedded Systems	Embedded Control of Robot motion	Ongoing
Dr. S. Mohamed MansoorRoomi	R.Jyothi Priya	Image Processing	Development of a novel image analysis techniques for object recognition	Ongoing
Dr. B. Yogameena	A. Geetha	Image Processing	Development of automatic general classification algorithms for Person Specific Identification	Ongoing
Dr. B. Yogameena	K.Menaka	Image Processing	Multiple motion analysis for an intelligent surveillance	Ongoing
Dr.A.Thenmozhi	T.R.Muthu	Radio Frequency	Design and Analysis of Base station Antennas for Cognitive Radio	Ongoing
Dr.M.S.K.Manikandan	G.Vennila	Networks	VoIP Security	Ongoing

Dr.S.Kanthamani	N.M. Mary Sindhuja	Radio Frequency	RF MEMS phase shifter	Ongoing
Dr.S.Raju	A.Ruth Jency	Radio Frequency	Design and Analysis of a class of adaptive antennas for wireless applications	Ongoing
Dr. S.J. Thiruvengadam	A.L.Chidambaram	DSP	Security protocols for underwater wireless communication networks	Ongoing
Dr.A.Banumathi	G.Jaffino	Image Processing	Identification of victims using various X-ray imaging modalities and photographic dental images	Ongoing
Dr.B.Sathya Bama	D.Synthiya Vinothini	Image Processing	Development of Super Reduction Image Reconstruction Algorithms	Ongoing
Dr.K.Hariharan	N.Kumutha	Radio Frequency	RF antennas	Ongoing
Dr.B.Yogameena	K.Sivakumar	Image Processing	Analysis & Management of Human Abnormal Presence & Action	Ongoing
Dr.B.Yogameena	E.Komagal	Image Processing	Development of algorithms for video surveillance applications using PAN tilt zoom camera	Ongoing
Dr. B.Sathya Bama	A.Sivasankar	Image Processing	Development of Large Scale Real Time Object Recognition and Classification System	Ongoing
Dr.N.B.Balamurugan	B.Bhuvaneswari	VLSI	Analysis and simulation of multigate MOSFETs including quantum effects	Ongoing
Dr.S.J.Thiruvengadam	Chandran Sekaran	DSP	Physical layer approach for security in multiantenna cognitive radio networks	Ongoing
Dr.N.B.Balamurugan	S.Manikandan	VLSI	Analysis and Simulation of Multigate MOSFETs	Ongoing
Dr.B.Yogameena	C.Nagavani	Image Processing	Human Activity Recognition in a Synoptic Video	Ongoing
Dr.B.Sathya Bama	R.Anadha Murugan	Image Processing	Development of Recognition Methods for Night Vision Applications	Ongoing
Dr.B.Sathya Bama	K.Uma	Image Processing	Development of od Deep Learning Methods for the Recognition and Retrieval of Objects in Complex Environment	Ongoing
Dr.S.Mohamed Mansoor Roomi	A.Sasithradevi	Image Processing	Development of Video Object Representation for Content Based Video Retrieval	Ongoing
Dr.K.Hariharan	P.Sathees Lingam	Embedded Systems	Multi-core Embedded Wireless Sensor Network	Ongoing
Dr.M.Suganthi	Chitra Sudhakaran	Networks	Interference Temperature Aware Spectrum Sensing and Routing in Cognitive Radio Networks	Ongoing
Dr.S.Ponmalar	V.Anusooya	Networks	Design and Simulation of All-Optical Logic for High Speed Optical Communication Networks	Ongoing