Accredited with 'A+' Grade by NAAC NBA Accredited UG Courses : CSE & MECH | Anna University Approved Research Centres : ECE, EEE, CSE & MECH Dr. E.M. Abdullah Campus, Ramanathapuram - 623 502 Tamilnadu. Ph: 04567 - 222 234, Mobile : 94873 04000, 84893 04000, 87548 88877 | E-mail : office@syedengg.ac.in | Web : www.syedengg.ac.in

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ERING COLLEGE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

	FACULTY PROFILE	
Name	: Dr. S. MURUGESWARI	
Designation	: ASSOCIATE PROFESSOR & HEAD	
Contact Address	: Department of BME,	
	Syed Ammal Engineering College,	
	Ramanathapuram – 623 502.	
Contact Mobile No.	: 9942042076, 9047931137	
Email id	: murugeskabilan@syedengg.ac.in,muru	ıgeskabilan@gmail.com
Areas of Interest	: Medical Image processing, RF and Mi	crowave, VLSI,
Communications		

Qualification

- B.E. (Electronics and Communication Engineering)- April 1998 MK University
- M.E. (Applied Electronics)- April 2004 Anna University

ED AMMAL E

TUN

• Ph.D (Information and Communication Engineering) – February 2018 – Area of Research: Medical Image Processing – Anna University, Chennai

Experience

- 25.06.199 to 30.06.2004: Lecturer Syed Ammal Engineering College
- 01.07.2004 to 30.06.2012: Assistant Professor Syed Ammal Engineering College
- 01.07.2012 to 15.09.2023 : Associate Professor -- Syed Ammal Engineering College
- 16.09.2023 to Till date : Associate Professor/HOD -- Syed Ammal Engineering College



Subjects handled:

- **1. Electronic Devices**
- 2. Electronic Devices and Circuits
- 3. Solid state circuits
- 4. Electronic circuits I
- 5. Electronic circuits II
- 6. Linear Integrated Circuits
- 7. Digital Electronics
- 8. Digital Circuits and system design,
- 9. Communication Engineering
- **10. Information theory and coding**
- **11. Display devices and systems**
- 12. Antennas and wave propagation
- **13. Optical Communication**
- 14. Satellite communication
- **15. Digital Image Processing**
- 16. Analog and Digital Communication
- 17. Analysis and Design of Analog Integrated Circuits
- 18. RF and Microwave Engineering
- **19.** Mobile Communication,
- 20. Wireless Communication



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21. Measurements and Instrumentation

22. Microwave Engineering

Publications in Conferences:

- 1. Nithya and **S.Murugeswari** "An Optimized Hybrid Method Based on Ant colony for Macula", Internatinal conference on VLSI Computer Netwoks, Drives, System Design, March 2014.
- S. Murugeswari "Severity Assessment of Diabetic Macular Edema for Clinical Investigations GMM classifier", IEEE International Conference on Advanced Communication Control and Computing Technologies, ICACCCT' 16, Ramanathapuram, India, pp. 204 – 212, May 2015.
- R. Dhanasekaran, G. Mahendran, S. Murugeswari and S. Mofia Fargana, "Investigation of Diabetic Retinopathy using GMM classifier", IEEE International Conference on Advanced Communication Control and Computing Technologies, ICACCCT' 16, Ramanathapuram, India, pp. 184 – 187, May 2016.
- P.Pandeeswari and S. Murugeswari and "A Partition Based Bloom Filter for Fastest Data Search", IEEE International Conference on Advanced Communication Control and Computing Technologies, ICACCCT' 16, Ramanathapuram, India, pp. 184 – 187, May 2016
- 5. B.Akilandaeswari and **S.Murugeswari** "An Efficient Perforation Based Neuron Model for Digital Application" International Conference on Emerging Trends in Engineering, Science and Sustainable Technolgy, 1-8, March 2017.
- 6. J.C.Daisy Roselin, Dr. G.Mahendran &Dr. S.Murugeswari, "Stack Based Configurable Logic GATES Technology for IP Cores", IEEE 8 th International Conference on Information Communication and Embedded Systems, Chennai, India, March 2019.
- 7. Dr.S.Murugeswari, K.shruti "Self tunable approximate computing for FIR Filter Design" International Conference on Nanotechnology: Ideas, Innovations and Initiatives (ICN2K19), Ramanathapuram, India, Nov, 2019
- M.Susmitha,G. Mahendran, M. Periyasamy, S. Murugeswari, B.Saravanan and K.Jejasudha "Design of efficient code convertor using Quantom dot cellular automata 'International Conference on Innovative Research in Applied Engineering and Computing 2021.
- 9. Mahendran G, Affrin Afsana S.D, Periyasamy M, Murugeswari S, Praveen Samuel Washburn, "IoT Based Landslide Detection and Prevention System, "International Conference on Innovative Research in Applied Engineering and Computing Methodologies", Ramanathapuram, India, 13-14, August 2021.
- Kamila,S.Murugeswari "Realization of security aware low power sensor node deployment using Fuzzy LOA optimization" International Conference on Innovative Research in Applied Engineering and Computing 2021.



- Affrin Afsana A and Mahendran G, "QCA Design of Reversible Comparator using Modified C-NOT GATE", International Conference on Emerging Trends in Engineering and Technology (ICETET'22), Sivagangai, India, April 2022.
- 12. Nazreen Roja R., Mahendran G., Murugeswari S., Praveen Samuel Washburn, "QCA Design of Fault Tolerant Voter Circuit for Triple Modular Redundant System", 2nd International Conference on Emerging Trends in Communication, VLSI and Signal Processing, Trichy, India, March 2023.
- 13. Thenmozhi N., Murugeswari S., Mahendran G., Praveen Samuel Washburn, "A Low Cost VLSI architecture for IoT enabled Sensor network with optimized cluster head selection", 2nd International Conference on Emerging Trends in Communication, VLSI and Signal Processing, Trichy, India, March 2023.
- 14. Venkatesan., Murugeswari S. and Mahendran G."A smart Approach for Wireless Adhoc To detect various Attacks", 2nd International Conference on Emerging Trends in Communication, VLSI and Signal Processing, Trichy, India, March 2023.

Publications in Journals:

- S.Murugeswari and R.Sukanesh, "Impulsive Taxation of Diabetic Maculopathy from Tint Retinal Metaphors" International Journal of Computer Applications Volume 82 – No 11,pp.12-16 ,ISSN: 0975 – 8887, November 2013.
- 2. S.Murugeswari and R.Sukanesh, "Detection of diabetic maculopathy Using KNN algorithm" Applied Mechanics and Materials Vol. 573 ,pp 791-796,June 2014.
- 3. S.Murugeswari and R.Sukanesh," Investigations On Diabetic Macular Edema Using Motion Pattern Estimation to Prevent Vision Loss ' ARPN Journal of Engineering and Applied Sciences, VOL. 10, NO. 7,pp. 2940-2947, ISSN: 1819-6608, July 2015.
- 4. S.Murugeswari and R.Sukanesh, "Severity Assessment of Diabetic Macular Oedema for clinical investigations" International Journal of Applied Engineering Research ,10, pp.753-757, ISSN: 0973-4562, Aug 2015.
- 5. S.Murugeswari and G.Kavitha, "Performance analysis of Bit Error Rate for Fast fading channels" International Journal of Applied Engineering Research ,10, 174-178, ISSN: 0973-4562 Aug 2015.
- S.Murugeswari and R.Sukanesh," Assessment of Severity Level for Diabetic Macular Oedema Using Machine Learning Algorithms" Circuits and Systems, vol.7, pp. 1098-1105, ISSN: 2153-1285, May 2016.
- S.Murugeswari and R.Sukanesh " Examinations on Diffuse Diabetic Macular Oedema using Neural Networks" Journal of Medical Imaging and Health Informatics ,Vol. 6, 1–5, 2016. doi:10.1166/jmihi.2016.1967,December 2016.

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- Murugeswari, S & Sukanesh, R, 2017, 'Investigations of severity level measurements for diabetic macular oedema using machine learning algorithms', Irish Journal of Medical Science, Vol. 186, No. 4, pp. 929-938. May 2017. DOI: 10.1007/s11845-017-1598-8, ISSN : 0021-1265, (Annexure I)
- S.Praveen Samuel Washburn, Mahendran, Dhanasekaran, Periysamay, Murugeswari, "Investigation of Severity Level of Diabetic Retinopathy using Adaboost Classifier Algorithm", Materials Today:Proceedings, DOI: 10.1016/j.matpr.2020.03.199. Vol.33, Part 7, pp. 3037-42, April 2020
- M. Periyasamy, Mahendran Gandhi, B. Sakthivel, S. Murugeswari, "A Novel Fault Tolerant Multiplier using Single Digit Conversion based Self checking Scheme", Materials Today:Proceedings, DOI: 10.1016/j.matpr.2020.03.204
- 11. G. Mahendran, M. Periysamy, S. Murugeswari, N. Karthika Devi, "Analysis on Retinal Diseases using Machine Learning Algorithms", Materials Today:Proceedings,DOI: 10.1016/j.matpr.2020.03.691
- G. Mahendran, M. Periysamy, S. Murugeswari, S. Praveen Samuel Washburn "A VLSI implementation of FIR filter using self tunable addition and multiplication" Materials Today: Proceedings 33 (2020) 4318–4322.
- Praveen Samuel Washburn, Mahendran, Periyasamy, Murugeswari, Karthika Devi, Divya, Jeya Sudha & Raga Rakshanya, Hardware Based Identification of Bright Lesions to Diagnose Diabetic Retinopathy, Materials Today: Proceedings, April 2021 https://doi.org/10.1016/j.matpr.2021.03.335.
- 14. Kirubanandasarathy Nageswaran, Murugeswari Selvan & Mahendran Gandhi 'A Hybrid Transform for Reduction of Peak to Average Power Ratio in OFDM System' Wireless Personal Communications (2021)20.02.2021.
- A.Shyamala,S.Murugeswari,G.Mahendran&R.Jothi Chitra "Hybrid grey assisted whale optimization based machine for the COVID-19 prediction, Computer Methods in Biomechanicsand Biomedical Engineering, <u>https://doi.org/10.1080/10255842,2023.2292008,19</u> Dec 2023.

Books Published

• 'Electronics Communication: Basics of Advancements", Dr. S. Murugeswari, Dr. G. Mahendran, S. Praveen Samuel Washburn and Dr. Chandra Kumar Dixit, Academic Guru Publishing House (AGPH) Books, ISBN: 978-93-94339-05-7.

Book Chapters Published



- Dr. S. Murugeswari and Dr. G. Mahendran, 'A Review on the Realistic Mobility Models for Vehicular AD-Hoc Networks', in "A Handbook on Image Processing and Wireless Communication", 2021, pp. 114-126.
- Dr. G. Mahendran and Dr. S. Murugeswari, 'Security Attacks in Vehicular Networks and Survey on Recent Developments in Detection and Protection against Threats', in "A Handbook on Image Processing and Wireless Communication", 2021, pp. 127-138.

Patents Published:

S.No	Date	CBR.No/Application No/Dairy No	Patent Status with Date	Торіс
1	14.01.2021	202141001745 A	Filed on 14.01.2021 Published on 22/01/2021	An Intelligent Fast Compost Generator Bin With Automatic Segregation of Waste
2	15.02.2021	202141006236	Filed on 15.02.2021 Published on 19/02/2021	An Intelligent Jewel Display System Using Laser Pen Integrated With Display Unit
3	23.02.2022	202241009503 A	Filed on 23.02.2022 Published on 04/03/2022	Detecting Face Mask and Dictating No Mask customers to wear it using Deep Learning Technique in Shopping Mall

Details of Training Programme/ workshops organized

- Convener for Mini project competition organized by ISTE, SAEC, Ramanathapuram on March 17, 2012.
- Convener for Mini project competition organized by ISTE, SAEC, Ramanathapuram on March 16, 2013.
- Convener for Mini project competition organized by ISTE, SAEC, Ramanathapuram on March 18, 2014.
- Convener for Mini project competition organized by ISTE, SAEC, Ramanathapuram on March 14, 2015.
- Convener for Mini project competition organized by ISTE ,SAEC, Ramanathapuram on March 19, 2016.
- Organized Guest Lecture on Long Term Evolution by Resource Person Dr. A. Sivanantha Raja, Associate Professor, Alagappa Chettiar Govt. College of Engg. & Tech. on 04.03.2017.
- Coordinated Guest lecture on Long Term Evolution, March 4,2017, Syed Ammal Engineering College



- Convener for Mini project competition organized by ISTE, SAEC, Ramanathapuram on March 11, 2017.
- Coordinated Guest lecture on Long Term Evolution, March 4,2017, Syed Ammal Engineering College
- Convener for Mini project competition organized by ISTE, SAEC, Ramanathapuram on March 17, 2018.
- Coordinated Two days Workshop on PCB Design and PCB Assembling Process using Digital Technology, 18.01.2019 19.01.2019, Syed Ammal Engineering College
- Convener for Mini project competition organized by ISTE, SAEC, Ramanathapuram on Feb 23, 2019.
- Two days Workshop on PCB Design and PCB Assembling Process using Digital Technology, 18.01.2019 19.01.2019, Syed Ammal Engineering College
- Coordinated Webinar on introduction to Automotive Industry and Vehicle Network, 20.06.2020, Syed Ammal Engineering College
- Convener for ISTE Technical Webinar 24.09.2021
- Coordinator for of Alumni Technical Convention on 25.09.2021
- Coordinator for Two Days Workshop on 'PCB Fabrication and Assembling' during 25-26, April 2022 Resource Person: Mr. K. Senthil Kumar, Project Director, Nichitronics, Chennai
- Organised One Day Hands-On Training with Arduino Microcontroller on 04.05.2022 Resource Persons: Dr. A. Valanarasi, ASP/ECE, Mr. S. Praveen Samuel Washburn, AP/ECE
- Convener for Mini project competition organized by ISTE, SAEC, Ramanathapuram on May 14, 2022.
- Coordinator for Two Days Workshop on 'PCB Design and Fault Analysis' during 08-09, May 2023 Resource Person: Mr. K. Senthil Kumar, Senior Engineer, L & T Technologies, Chennai
- Convener for Two Days Workshop on 'Embedded 3D Printing Technologies' during 22-23, September 2023 – Resource Persons: Mr. M. Daniel, Senior Developer, Mr. A. Sheik Mohammed, Project Coordinator, Smart Makers Pvt. Ltd., Madurai.

Details of Seminars/Conferences organized

- Reviewer for ICACCCT'12, an IEEE International Conference on Advanced Communication, Control and Computing Technologies.
- Session chair for ICACCCT'12, an IEEE International Conference on Advanced Communication, Control and Computing Technologies
- Reviewer for ICACCCT'14, an IEEE International Conference on Advanced Communication, Control and Computing Technologies
- Session chair for ICACCCT'14, an IEEE International Conference on Advanced Communication, Control and Computing Technologies
- Reviewer for ICACCCT'16, an IEEE International Conference on Advanced Communication, Control and Computing Technologies



- Coordinator for Guest Lecture on Long Term Evolution by Resource Person Dr. A. Sivanantha Raja, Associate Professor, AlagappaChettiar Govt. College of Engg. & Tech. on 04.03.2017.
- Coordinator for IETE Sponsored Technical events TechProbe'18 on 10.03.2018
- Coordinator for Alumni Technical Convention on 23-24.08.2019
- Coordinator for Alumni Technical Convention on 19-20.03.2020
- National Level Students Technical Symposium 'INNOWAVE-2020,31.01.2020
- Coordinator for Alumni Technical Convention on 25.09.2021
- ISTE Technical Webinar 24.09.2021

WEBINARS ORGANISED

S.No.	Acad.	Event	Venue	Date
	Year			
		Coordinator for Webinar on	SAEC ECE in	30.05.2020
		EFFECTIVE INTERVIEW	Association with	
	2019-	TECHNIQUES AND RESSUME	ECE Alumni	
	20	BULIDING Mrs. R.T.		
		Priyadharashini, HR & Operation		
		Manager, Transkart Logistics,		
		Mumbai.		
	2019-	Coordinator for Webinar on	SAEC ECE in	03.06.2020
	20	MOBILE APPLICATION	Association with	
		AUTOMATION USING APPIUM	ECE Alumni	
		-		
		Mr. M. Velladurai, Asst.,		
		Consultant, TCS, Chennai		
1	2019-	Coordinator for Webinar on	SAEC ECE in	17.06.2020
	20	MEDICAL APPLICATIONS OF	Association with	
		DIGITAL IMAGE PROCESSING	ECE Alumni	
		TECHNIQUES – Dr. G.		
		Mahendran, HOD/ECE		
	2019-	Coordinator for Webinar on	SAEC ECE in	27.06.2020
	20	TECHNOLOGY AND THE NEW	Association with	
		WORLD AHEAD- Mr.G.K	ECE Alumni	
		.Aditya Vignesh Ram, Digital		
		Infrastructure & Cyber Price		
		Waterhouse Coppers, Middle East		
		Regions		
	2021-	Convener for ISTE Technical	ISTE in	24.09.2021
	2022	Webinar	Association with	
			SAEC Alumni	



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	PARTICIPATION				
S. No.	Activity participated	Number of Activities participated			
1	FDP/STTP/Seminar/Workshop	28			
2	FDP/STTP/Seminar/Workshop (Through Online)	64			

NPTEL COURSES					
Month and	Name of the course	Grade Obtained			
Year of Exam					
November 2019	Digital Image Processing	Elite Silver			

LIST OF Ph.D. SCHOLARS

NOTE :		Centre	E For	Res		h				
			SCHOLAR D	TAILS						
S.NO	REGNO	NAME	DEGREE	FACULTY	REG YEAR	REG SESS	SUPERVISOR	STATUS	1	
1	22244797219	Minarva Devi K	Ph.D.	lce	2022	JUL	Supervisor	Course Work		
2	18134791571	Ravivarma P	Ph.D.	lce	2018	JAN	Joint Superviso			
		2020 © Ca	entre for Research <u>Home</u>		eserved.					

Acted as a reviewer in the following international journals and conferences

- International Conference on Advanced Communication Control & Computing Technologies • (ICACCCT '12)
- International Conference on Advanced Communication Control & Computing Technologies • (ICACCCT '14)



- International Conference on Advances in Applied Engineering and Technology (ICAAET'15)
- Reviewer for ETRI (Electronics and Telecommunications Research Institute) Journal
- International Conference on Advanced Communication Control & Computing Technologies (ICACCCT '16)
- Reviewer for JERR(Journal of Engineering Research and Reports)

Membership/Fellowship in Professional bodies

- Life member **ISTE**
- Life member **IETE**
- Annual member IEEE

AREAS OF INTEREST

- Digital Signal/Image Processing
- Wireless Communication
- VLSI Design
- RF and Microwave Engineering
- Analysis and Design of Analog Integrated Circuits
- •

Details for acting as a Doctoral Committee member for Ph.D Students

Name of the Students	Register Number	Title of their Ph.D Work
Mrs. N. KartikaDevi	21234791537	Investigations on Diabetic Maculopathy
Mr. K.Jayaprakasam	22124791272	Brain tumor detection using deep learning algorithm

List of additional responsibility handled

Redresses committee Convener (2002-2005)

Auditor for ISO

ISTE convener

Hostel Convener

Session chair

Judge for various events conducted in inside the campus and other college.

Library Committee Member

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Class In- charge

TÜV

Counselor

Chair Person

Faculty coordinator

PTA Convener

LFA Coordinator

HOD for BME