

A. Suban, M.E.,

Name of the Faculty with Educational Qualification

Designation and Department

Velammal College of Engineering and Technology, Madurai

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Blog Address:

Educational Qualification:(will be either in Table (or) Paragraph starting with Higher Degree)

DEGREE	UNIVERSITY/ BOARD	YEAR OF PASSING
Ph.D	Anna University, Chennai	Pursuing
M.E (Wireless Technologies)	Anna University of Technology, Tirunelveli	May, 2011
B.E (ECE)	Anna University, Chennai	May 2007
HSC	State Board	March 2003
SSLC	Matriculation	March 2001

Experience in Years: 11 Years 3 Months

Employment History:

Period		No. of Years	Designation / Nature of job	Institute /Organisation
From	To			
01.06.2011	Till Date	11 years	Assistant Professor/ Teaching & Research	Velammal College of Engineering & Technology, Madurai

Interested Research Areas: Digital Signal Processing

Scholarships and Awards received:

Details	Awarded for the work	Status	Remarks
ISSS Best Mentor Award by Institute for Smart Structures and Systems (ISSS), IISc Bangalore	Life Saving Siren System from Dam Water Discharge	Received on 10 th July, 2014	In Himachal Pradesh, 24 people were washed away, at Thalaut in Mandi district, when water

<p>IEEE – R10 Young Engineer’s Humanitarian Challenge (Aiyehum) Award</p>	<p>Environmental Hygienic Automatic Garbage Disposal System</p>	<p>Received for the year 2015</p>	<p>was released from Pandoh Dam into the Beas River. This project is developed to overcome such uncertain incidents</p> <p>This work assures pollution free environment to the society</p>
<p>IEEE – R10 Young Engineer’s Humanitarian Challenge (Aiyehum) Award</p>	<p>Automatic Indication and Water Sprinkling System in Firework Industries</p>	<p>Received for the year 2016</p>	<p>This work helps to prevent the loss of lives due to firework accidents.</p>
<p>Sir. C. V. Raman Award by Bannari Amman Institute of Technology</p>	<p>Automated Hygienic Sanitary Napkin Burnt and Disposal System</p>	<p>Received on 10th, October 2014</p>	<p>Aim is to implement adequate sanitation disposal facilities for establishing a clean</p>
<p>Approved by “The Ministry of Drinking Water and Sanitation”, The Government of India for publishing innovation</p>	<p>Automatic Sanitary Napkin Disposal System</p>	<p>Published in the ministries official website http://mdws.gov.in</p>	<p>and hygienic environment in the society of women which can in turn prevent the onslaught of diseases through contamination thereby lending hands for the SWaCH Bharath mission</p>
<p>Young Innovation Award by Velammal College of Engineering</p>	<p>Automated Residential Garbage Disposal System</p>	<p>Received</p>	<p>The developed prototype facilitates the disposal of garbage at source level (at every home) itself</p>
<p>Best Paper Award for the work presented in International Conference on Signal Processing and Communication Engineering</p>	<p>Joint Resource and Power Allocation Techniques for 5G Massive MIMO System</p>	<p>Received on 5th March, 2020</p>	<p>In this work a combination of two densification approaches, namely “massive” multiple-input multiple-output (MIMO) base stations and beamforming along with Per-Antenna power constraint techniques</p>

Awarded First Rank by Anna University of Technology, Tirunelveli	University recognized for securing highest mark in the degree of Master of Engineering in Wireless Technologies programme	Received on 18.02.2012	are incorporated to improve the performance of the system Nil
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Lab Establishment:

COMRAD [COMTEK Sponsored Research and Development] LAB equipped with devices worth of Rs. 15 Lakhs was established in association with COMTEK Scientific Instruments, Bengaluru.

Funded Research Projects:

Funding Agency: DST

Scheme: IEDC

Title: **LOW COST LIFESAVING AND FIRE ACCIDENT PREVENTION SYSTEM IN FIREWORK INDUSTRIES**

Sanctioned Amount: 1,00,000

Year: 2019 - 2020

Patent rights received:

1. Patent granted for the innovation titled “A CNN Based Model for Disease Classification Using High Temporal and Spatial Resolution Images of Simultaneous EEG-MRI” by the Australian Government

Publications Details:

1. Patent Journal Publication Details:

1. Published patent on title “Square Shaped CSRR Metamaterial Inspired Rectangular Patch Antenna for Triple Band Application” dated 05.06.2020 and in final examination phase.
2. Examination report generated for the work titled “Automatic Fire Sensing and Extinguishing Robot” under design patent application category by IPR

CONSULTANCY WORK DONE

Nature of work	Interacted Industry /Institute	Year	Details	Facilities utilised / co-Workers	Revenue Earned
Development of algorithm required by V-Infotech	V-Infotech Technical Solutions, Bengaluru	2014	Image Processing algorithm is developed to update the attendance of the workers in V-Infotech	Utilized Evorieaskills lab at Bengaluru for designing PCB on Eagle platform	Rs. 20,000

Design and Software Development	COMTEK Scientific Instruments	2021	automatically Work involves Electronic Design and Software Development of a CCD array based light detection systems	Sponsored lab Worth Rs.15,00,00 and Mr. Jeyakumar, MD, Comtek Scientific Instruments provided training on modern optical equipments	Work is in progress
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3. International Journal Publication Details:

Sl.No	Title of the Paper/Book	Name of the Journal/Publisher	Year of Publication
1.	Paper titled "Modern Power Factor Correction Technique using Arduinio Mega2560"	IOP Science – Scopus Indexed Journal.	2020
2.	Improving Energy Efficiency by Bayesian Channel Estimation and Joint Multiflow Beamforming In Massive MIMO System	Journal of Emerging Technologies and Innovative Research (JETIR) November 2018, Volume 5, Issue 11	2018
3.	Performance Analysis Of MIMO-OFDM System With Perfect Channel Estimation And Beamforming Technique	GE-International Journal of Engineering Research	2017
4.	Compressed Signal Recovery by Convex Optimization and Non-Convex Regularization	International Journal of Engineering Research & Technology	2017
5.	Cooperative Beamforming and Efficient Resource Allocation for Large Scale Global Optimization		
6.	Beamforming with Per-Antenna Power Constraint and Transmit Antenna Selection using Convex Optimization Technique		
7.	Energy Efficient Power Control & Bayesian Channel Estimation for Massive MIMO		

Sl.No	Title of the Paper/Book	Name of the Journal/Publisher	Year of Publication
8.	Adaptive Beamforming Algorithm with Increased Speed and Improved Reliability for Smart Antennas	International Journal of Advanced Research in Computer and Communication Engineering (IMPACT FACTOR 5.332)	2016
9.	Design of Analog and Digital Beamformer for 60GHz MIMO Frequency Selective Channel through Second Order Cone Programming	IOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 5, Issue 6, Ver. II (Nov-Dec. 2015), PP 91-97	2015
10.	Improvement in Performance of MIMO systems by Designing a combined Analog & Digital Beamforming	An International Journal MASIVJ Journal	2015
11.	Concert augmentation in Cognitive Radio system with OFDM and Beamforming technique for Data Communication	International Journal of Advanced Research in Computer Engineering and Technology	2013
12.	Interference Mitigation in LTE-Advanced MU-MIMO through Beam forming Technique	International Journal of Advanced Research in Computer Engineering and Technology	2013
13.	Performance Enhancement of Data Communication through visible light Communication	International Journal of Advanced Research in Computer Engineering and Technology	2013
14.	Performance Evaluation of LTE Systems with Signal Detection Algorithm	Coimbatore Institute of Information Technology International Journal (CiIT) (Applied)	2012

4. International Conference Presentation Details:

Sl.No	Title of the Paper/Book	Name of the Journal/Publisher	Year of Publication
1.	Joint Power Allocation and Beamforming Techniques for 5G Massive MIMO Systems using Distributed ADMM	3 rd National Conference on Communication & System Design Conducted by PSG Institute of Technology and Applied Research	2022
2.	Downlink Channel Estimation in Massive MIMO System using Approximate Message Passing and		

	KNN based SINR & Power Constraint ML Techniques		
3.	Received Best Paper Award for the project titled “Joint Resource and Power Allocation Techniques for 5G Massive MIMO System in International Conference on Signal Processing and Communication Engineering” on 05 th March, 2020	M. Kumarasamy College of Engineering	March, 2020
4.	International Conference On Electronics and Communication Engineering (ICECE-2012), October, 2012 on title Cognitive Radio System with Beamforming and OFDM For Enhanced Performance	IRNet A unit of Interscience Institute of Management & Technology, Mysore	October, 2012
5.	International conference on SCEECS 2012 on title Comprehensive Analysis of MIMO-OFDM with PAPR Reduction Using PTS	NIT, Bhopal	March, 2012
6.	Conference on Engineering and System [SCES 2012] on title Performance Enhancement in MIMO-OFDM using Improved PTS Technique with Spatial Multiplexing	NIT, Allahabad (Published in IEEE xplore)	March, 2012
7.	International Conference on Emerging Technological Trends in Advanced Engineering Research [ICETT 2012], 2012 February 20-21 on title Trade Off Subjugation in MIMO-OFDM using M-ary Modulation Schemes	Baselios Mathews II College of Engineering, Kollam, Kerala, India	February, 2012
8.	Renovation of Next Generation LTE-Advanced Through Beamforming and Coordinated Multipoint	International Conference on Innovations in Electronics, Communication and Computing-ICIECC ,,14	2014

5. National Conference Presentation Details:

Sl.No	Title of the Paper/Book	Name of the Journal/Publisher	Year of Publication
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1.	National Conference on Intelligent techniques in control, optimization and signal processing [INCOS'12], 2012 March 2-3 on title Trade Off Subjugation in MIMO-OFDM using M-ary Modulation Schemes by PAPR Reduction	Kalasalingam University	March, 2012
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6. Google Scholar report:



Suban Athi

Assistant Professor of ECE, Velammal College of Engg and Tech
Verified email at vcet.ac.in

Digital Signal Processing Spacetime Wireless Comm...

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TITLE	CITED BY	YEAR
Performance enhancement of data communication through visible light communication using on off keying A Suban, P Prabu, R Manikandan, M Pradeep Int. J. Adv. Res. Comput. Eng. Technol.(IJARCET) 2 (2), 559-563	6	2013
Comprehensive analysis of MIMO-OFDM with PAPR reduction using PTS (The most efficient way of communication) A Suban, RR Brintha, M Gayathri, RN Prabha 2012 IEEE Students' Conference on Electrical, Electronics and Computer ...	6	2012
Mitigating effect of flickering & dimming in visible light communication using MIMO A Suban, P Prabu, R Manikandan, M Pradeep International Journal of Electrical and Computing Engineering 1 (1), 8-12	2	2014

Cited by

	All	Since 2016
Citations	17	10
h-index	2	1
i10-index	0	0

