

Dr. R.Sandalakshmi Assistant Professor
Electronics and Communication Engineering

Date of Birth: December 08, 1976
Date of First Appointment in PEC: June 18, 2007



Qualification Details

Sl. No.	Degree	Course	Specialization	Year & Month	Board / University	Score / Grade / Class
1	Degree	Bachelor of Engineering	Electronics and Communication Engineering	1998	University of Madras	First
2	Degree	MTech	Electronics and Communication Engineering	2000	Pondicherry University	First
3	Degree	PhD	Studies on QoS improvement for OFDM based wireless networks	January 2012	Pondicherry University	Awarded

Experience

19 years of teaching experience in the field of Electronics and Communication Engineering.
UG level - 19 years
PG level – 12 years
Research – 12 years
Date of joining PEC : 18/6/2007

Membership in Professional Bodies

Life member in the Indian Society for Technical Education

No. of Ph. D s guiding currently: 03

Patents

Patents titled "Non-Invasive Body Fluid Monitor" has been filed in the year 2017 under collaborative project between Pondicherry Engineering college and JIPMER funded by Department of science and Technology.

Externally Funded Project Details

Sl. No.	Project Name	Funding Institution	Date From	Date To	Project Details	Description
1	Feasibility study for Non-invasive prognosis of De	Department of Science and Technology	September 10, 2014	March 31, 2017	Collaborative project with JIPMER	Co-Prime Investigator
2	Radio Resource Management for 5G wireless networks	AICTE	April 17, 2019	April 17, 2022	RPS - NDF SCHEME	PROJECT CO-ORDINATOR

PUBLICATIONS:

Journals

1. R. Sandanalakshmi ,V.Sardius ,”Selected Saliency Based Analysis for the Diagnosis of Alzheimer's Disease Using Structural Magnetic Resonance image” , **Journal of Medical Imaging and Health Informatics**,Vol.6,Pg.No.1-“8, ISSN: 2156-7018 (Print): EISSN: 2156-7026 (Online) .
2. R. Sandanalakshmi , I.Aravindh ,”VLSI Fuzzy Decision Controller Based ECG Encoder”, *Procedia computer science*,Vol.85,Pg.No:496-502, ISSN :1877-0509,February 2016.
3. R.Sandalakshmi ,Rajagopalan.P,Ajai Karan.B,Rajarajan.G “Neural based non-invasive diagnosis and Classification of sepsis”, *International Journal of Computer Science and Information Security*,Volume 14,October 2016. **ISSN 1947 5500**.
4. R. Sandanalakshmi, P. Samundeeswari and R. Soundravally “A Non-Invasive Method for Diagnosis of Dengue Fever using Ultrasound Image of the Liver”, *CiiT International Journal of Artificial Intelligent Systems and Machine Learning*, **July 2013**.
5. R.Sandalakshmi, P.Abinaya viji, M.Kiruthiga, M.Manjari, A.Sharina, “Speaker Independent Continuous Speech To Text Converter For Mobile Applications”, ***International Journal of Information Processing***, Vol.7, Issue -2, 2013. ISSN: 0973 – 8215.
6. R.Sandalakshmi, V.Martina Monfort, G.Nandhini, “A Novel Speech to Text converter System for Mobile Applications” , ***International Journal of Computer Applications***, Vol. 73, July 2013. ISSN: 0915 -8887.
7. R.Sandalakshmi , D.Kadhiravan, “Modified EESM Link Adaptation Method With Multiple Constellation For Future Wireless Networks”, ***International Journal of Research in Computer and Communication Technology***, Vol.2, No.7, July 2013. ISSN (Online) – 2278 – 5841, ISSN (Print) – 2320 – 5156.
8. “Modified EESM based Link Adaptation Algorithm for Multimedia Transmission in Multicarrier Systems”, ***International Journal of Computer Science Issues***,Vol.7, Issue 1, No3, January 2010. ISSN: 1694-0784.
9. “Effective SNR Mapping for Link Error Prediction in OFDM based Systems”, ***IETECH Journal of Communication Techniques***, Volume. 2, No: 3, 134–139 , IETECH Publications, 2008.ISSN: 0973-8053.

10. A Technology Review and future scope of Bio-Memes in tropical disease detection, International journal of Engineering and Technology, vol.7, December 2018.

International conference

11. Efficient Network Security Architecture for Heterogeneous Smart meter Environment, ***International Conference on Innovations in Power, Energy and Intelligent Control Systems*** Surya Engg. College, Erode, Tamilnadu, July'19.(IPEICS-2019)
12. Secure Data Transmission in Heterogeneous Smart Meter Environment, ***IEEE International Conference on Innovations in Power and Advanced Computing Technologies***, Vellore Institute of Technology, January 2019.
13. A Technology Review and future scope of Bio-Memes in tropical disease detection”, ***RLJIT global conference on smart innovations in Engineering*** , R. L. Jalappa Institute of Technology , May-2018.
14. “VLSI Fuzzy Decision Controller Based ECG Encoder, ***Procedia computer science***, Vol.85, Pg.No:496-502, ISSN :1877-0509, February 2016.
15. “Dual Band Planar Inverted-F Antenna For LTE Based Mobile Equipments” ***IEEE International conference WISPNET*** , SSN College, March 2016.
16. “ Role of ARFI elastography for the diagnosis of breast tumour “ ***IEEE International conference ICCSP***, APEC April 2016,
17. “A Novel Non-Invasive method for prognosis of Dengue Fever” ***Proceedings of IEEE International Conference on Communication and Signal Processing - ICCSP' 13***, APEC , Melmaruvathur, Tamilnadu, India April 2013 .
18. “An Investigation towards unequal Modulation for 802.16 Systems based on Bivariate Modeling”, ***Proceedings of IEEE International Conference on Control, Automation Communication and Energy Conservation***, April 2009. ISBN: 978-81-8424-439-7, ISSN:1793-8198.
19. “Fair Channel Aware Packet Scheduling Algorithm for Fast UL HARQ in UTRAN LTE” ***Proceedings of IEEE International Conference on Control, Automation Communication and Energy Conservation***, April 2009. ISBN:978-81-8424-439-7, ISSN:1793-8198.
20. “An Analysis Of Link Adaptation Algorithms Based on Link Quality Metrics for IEEE 802.16 Systems”, ***The IEEE Colloquium and the third IEEE International Conference on industrial and Information Systems (ICIIS 2008)*** , Indian Institute of Technology, ***Kharagpur***, India .ISBN:978-1-4244-2806-9.
21. ”Low Feedback Link Abstraction Based on Novel Quality Model for 802.16e based Systems” ***IEEE TENCON 2008***, IEEE Hyderabad section November 18–21, 2008 held at University of Hyderabad.
22. ”Effective SNR Mapping for Link Error Prediction in OFDM based Systems”, ***ICTES 2007 (Information and Communication Technology in Electrical Sciences)*** , IET-UK, Chennai, India.
23. G.F.Sudha and R.Sandanalakshmi,” Hybrid Frequency and Time Hopping using Kasami Sequence”, ***IETE 21st Midterm Symposium on Emerging Wireless Communication Techniques and Systems***, IETE Ahmedabad Centre, 8 and 9 April 2000.

Courses Conducted Details

Sl. No.	Name of the Programme	Level	Sponsored By	Date From	Date To	Capacity/Role
1	Bio signal processing for telemedicine applications	National	Teqip	May 27, 2016	July 02, 2016	Co-ordinator
2	Enabling technologies to aid smart city framework	National	QIP-STC	February 06, 2017	February 10, 2017	Co-ordinator

Courses Attended Details

Sl. No.	Course Title	Sponsored By	Conducting Institute	Date From	Date To
1	Recent trends in parallel and distributed systems- Architecture , operating systems and algorithms	AICTE	Pondicherry Engineering College	November 16, 2009	November 27, 2009
2	Mission 10X	WIPRO	Pondicherry Engineering College	February 01, 2010	February 05, 2010
3	Nano Engineering materials	ISTE	Pondicherry Engineering College	December 13, 2010	December 23, 2010
4	Computational Intelligence to power system Analysis, Control & Optimization	AICTE	Pondicherry Engineering College	June 06, 2011	June 10, 2011
5	Recent Trends in Cloud Security	Department of IT , New Delhi	Pondicherry Engineering College	March 26, 2012	March 30, 2012
6	Design on Embedded Systems – Issues and Challenges	AICTE	Pondicherry Engineering College	April 16, 2012	April 27, 2012
7	Emphasis on smart operation & control of power markets using power electronic components	TEQIP	Pondicherry Engineering College	November 19, 2012	November 23, 2012
8	Recent Advances in Green Engineering	TEQIP	Pondicherry Engineering College	December 03, 2012	December 07, 2012
9	Wireless sensor networks- issues and challenges	TEQIP	Pondicherry Engineering College	November 11, 2013	November 15, 2013
10	NMIECT Products for Teaching	National Institute of Technical Teachers and Research ,chennai	Pondicherry Engineering College	August 21, 2014	August 22, 2014
11	Emerging trends in VLSI for Communication	AICTE	Pondicherry Engineering College	March 02, 2015	March 06, 2015
12	Interactive system design using Lab VIEW	National Institute of Electronics and Informaion Technology	NIELIT, chennai	January 19, 2015	January 23, 2015
13	Automata Theory and Compiler Design	MHRD/AICTE	Pondicherry Engineering College	February 23, 2015	February 27, 2015

14	Recent trends in development of communication : cognitive networks	AICTE under QIP,	Pondicherry Engineering College	November 30, 2015	December 04, 2015
15	Recent trends in Optimization Techniques and Applications	Teqip sponsored STTP	Pondicherry Engineering College	January 04, 2016	January 09, 2016
16	1st simulation course on surgical simulators for Engineers	Dpt. Of Surgical Gastroentrology	JIPMER	August 20, 2016	August 20, 2016
17	Recent Trends and Developments in Broadband Technologies	AICTE under QIP, STC	Pondicherry Engineering College	November 07, 2016	November 11, 2016
18	ICT Solutions for Issues and Challenges in Smart Grid Technology (ICTSSGT	AICTE under QIP, STC	Pondicherry Engineering College	November 28, 2016	December 01, 2016
19	5G mmWave Radio Transmission for Ultra-High Speed Wireless Technologies	AICTE under QIP, STC	Pondicherry Engineering College	November 13, 2017	November 17, 2017
20	INTERNET OF EVERYTHING (IOE) : GAINING GREATER INSIGHTS INTO AN EMERGING DIGITAL DRIVE	AICTE under QIP, STC	Pondicherry Engineering College	November 06, 2017	November 10, 2017
21	APPLICATION OF MICRO GRID IN DISTRIBUTED GENERATION TOGETHER WITH CLEAN ENERGY TECHNOLOGY (MGCET-2018)	AICTE QIP	Pondicherry Engineering College	January 29, 2018	February 02, 2018
22	STC on Recent trends in Wireless Multimedia Communications	AICTE-QIP	Pondicherry Engg. College	March 21, 2019	March 27, 2019

Invited Lectures Details

Sl. No.	Topic	Name of the Event	Name of the Institution with Place	Sponsored By	Date
1	Electromagnetics and its applications	For B.Tech students	Sri venkateswara college of Engg.and Tech, Puducherry	-	2017-08-18
2	Bio-signal processing techniques	EQIP – II sponsored “Emerging Trends in VLSI Signal processing	Sri Vidhyankthan Engineering College, Tirupathi, AP	Teqip -II	2016-08-26
3	Telemedicine	Enabling technologies to aid smart city framework	Pondicherry Engineering College	QIP STC	2017-02-09
4	Imaging modalities	Teqip – II sponsored “ Bio-signal processing for telemedicine applications	Pondicherry Engineering College	Teqip-II	2016-07-02
5	Artificial Intelligence in 5G networks	Technical Meet 2018	School of Electronics Engineering , pondicherry University	Institution of Engineers	2018-08-20
6	Transistors	FDTP on Electronic Devices	University College of Engineering, Panruti	Anna University ,Chennai	2017-11-26

Non Academic Contributions Outside PEC

Joint Secretary, Women Empowerment, Le Banyan de PEC, NGO by the alumni of PEC.

In the port folio, has organized several programmes to benefit the under privileged women and children community in Puducherry region.

