

TAGORE ENGINEERING COLLEGE

(A Member of Tagore Group of Institutions Chennai)

Approved by AICTE, New Delhi I Affiliated to Anna University, Chennai

ACCREDITED BY IQAC-NAAC WITH 'A' GRADE

FACULTY PROFILE

	PERSONAL DETAILS
Name & Qualification	Dr. R. PORSELVI & Ph.D
Designation	Associate Professor
Department	Electronics and Communication
	Engineering
Total Teaching	16 Years 05 Months
Experience	
Total Research	10
Experience	
Total Industry	3 Years
Experience	
Area of Specialization	Wireless Communication, VLSI
	Design
AICTE Faculty ID	1-492864285
Email ID	rporselvi@tagore-engg.ac.in



EDUCATIONAL DETAILS				
Degree	Branch/ Specialization	University	Year	
UG	B.E – ECE	University of Madras	2002	
PG	M.E- VLSI Design	Anna University	2008	
Ph.D	Wireless Communication	Anna University	2021	

RESEARCH / PUBLICATION DETAILS

Publications in Journal

- **1. R. Porselvi,** D. Kanchana, Beulah Jackson, L. Vigneash, 'Dynamic resource management for 6G vehicular networks: CORA-6G offloading and allocation strategies', published in a Research article 'The Scientific Temper (2024), Vol.15(2): 2116-2112. **(UGC care Listed Journal)**
- **2.** M. K. Vidhyalakshmi, S. Thaiyalnayaki, D. Bhuvana Suganthi, **R. Porselv**i, K. Kumuthapriya, 'Automated micro aneurysm classification using deep convolutional spike neural networks', published in an International journal of Wireless Networks,

Published online @8.7.2024.<u>https://doi.org/10.1007/s11276-024-03769-3</u>. **Indexed Journal**)

- 3. **Porselvi,** R & Murugan, M, 'Acquisition of state and DOS features based channel estimation for VTV mm wave Massive MIMO: A Deep Nested with Layered LSTM Approach', Published in an International Journal Applied Acoustics@ Elsevier Ltd, Volume 212, September 2023, 109590, https://doi.org/10.1016/j.apacoust.2023.109590. **(SCI Indexed Journal)**
- 4. **Porselvi, R** & Murugan, M, 'Acquisition of state and DOS features based channel estimation for VTV mm wave Massive MIMO: A Deep Nested with Layered LSTM Approach', Published in an International Journal Applied Acoustics@ Elsevier Ltd, Volume 212, September 2023, 109590, https://doi.org/10.1016/j.apacoust.2023.109590. **(SCI Indexed Journal)**
- Porselvi, R & Murugan, M, 'An efficient pilot-symbol-aided and decision-directed hybrid channel estimation technique in OFDM systems', Published in a Journal of National Telecommunication Systems (Modeling, Analysis, Design and Management)
 Springer 2019, ISSN 1018-4864 vol. 73, no. 4, Telecommunication System (2020), DOI: https://doi. org/10.1007/s11235-019-00620-5, pp. 531-544. (SCI Indexed Journal)
- 6. **Porselvi, R** & Murugan, M Meenasri P.S, Pradeepa.V, Channel Parameters Analysis using Cognative Radio-Wireless Sensor Network (CR-WSN) for Wireless Communication, 2019, Published in a i-manager's Journal on Wireless Communication Networks, Vol. 8, No.2, July- September 2019.
- 7. Nathinipriyanka.R, Porselvi.R, Murugan.M, "Performance Analysis of Channel Estimation using Training Sequences", published in an International Journal of Applied Engineering Research, Volume 10, Number 9, pp.8542-8547, ISSN:0973-4562 (2015). (SCOPUS Indexed Journal)
- 8. **Porselvi.R**, Murugan.M, "Different Channel Estimation Techniques for Orthogonal Frequency Division Multiplexing (OFDM) Systems", published in an International Journal of Applied Engineering Research, Volume 10, Number 42, pp.30734-30739, ISSN:0973-4562 (2015). **(SCOPUS Indexed Journal)**
- 9. **Porselvi.R**, Murugan.M "International Journal of Scientific & Engineering Research, "Area Efficient Network on-Chip Router In Packet Switching", Volume 5, Issue 4, ISSN 2229 5518 (April 2014).

IEEE Scopus Indexed

10. Dr. R.Porselvi, "Enhanced Expectation -Maximization Algorithm for Smart Traffic IoT Systems using Deep Generative Adversarial Networks to Reduce Waiting Time", Proc. 4th International Conference on Electronics and Sustainable Communication Systems (ICESC), 06-08 July 2023, IEEE Xplore- 01.08.2023 @ Coimbatore,India.ISBN-979-8-3503-0009-3 DOI: 10.1109/ICESC57686.2023.10193089.

Conference Proceedings

- Dr. R.Porselvi, "Internet of Things based Revolution Healthcare Industry with Anesthesia Machine control: The Future of Medical Technology", Proc. 4th International Conference on Electronics and Sustainable Communication Systems (ICESC), 06-08 July 2023, IEEE Xplore- 01.08.2023 @ Coimbatore, India. ISBN- 979-8-3503-0009-3, DOI: 10.1109/ICESC57686.2023.10193089.
- 2. **Dr. R.Porselvi**, M.Divya, K.Kumuthapriya, Dr. P.Radhakrishnan, "Logical Attack Detection for Securing FPGA with Self-Repairing Systems", Proc. 7th International conference on Recent Advances in Science, Engineering and Management (ICRASEM) at Tagore Engineering College, Chennai, 25th January 2023.
- 3. R.Janani, S.Sowmiyaa, E. Anandhi, **Dr.R.Porselvi**, Mrs. K. Kumutha Priya, "Innovative Technology for Smart Road Connectivity", Proc. 7th International conference on Recent Advances in Science, Engineering and Management (ICRASEM),) at Tagore Engineering College, Chennai, 25th January 2023.
- 4. M.Divya, Dr. R.Porselvi, K.Kumuthapriya "Design of Logical Attack Detection Framework for Securing SOC Device", Proc. Virtual 3rd International Conference on Science, Engineering and Technology (ICSET 2K22) organized by the Sri Venkateswaraa College of Technology, Chennai, 26th & 27th May 2022. (ISBN:978-93-91303-01-03), DOI: https://doi.org/10.47715/JPC.B.83.2022.97893913030103
- Dr.T.Suresh, Dr.R.Porselvi, "Improved the Security of Mutual Authentication Protocol in RFID system using NFSR", Proc. International Conference on Research Innovation in Science, Engineering and Technology (IVCRISET 2022)"at Kings Engineering College, Chennai, on 1st & 2nd March 2022.
- Porselvi.R, Vishali Priyanka. C "Electronic Toll Collection (ETC) of Deducting money in Toll plaza with RFID Technology", Proc. AICTE Sponsored International E-Conference on Electrical Communication and Computing (ICECC)" at Tagore Engineering College, Chennai, on 20th & 21st August 2020.
- 7. **Porselvi.R**, Murugan.M, "Hybrid Pilot Assisted and Decision-Directed Channel Estimation (PSADDCE) Techniques for OFDM Systems", Proc. International Conference on Electrical Communication and Computing (ICECC) at Tagore Engineering College, Chennai, on 12th & 13th March 2019.

- 8. Jeenath Begum.M, Ishwaraya.P, Barkavi.T, **Porselvi.R**, "IIOT Control System based on SCAD", Proc. International Conference on Electrical Communication and Computing (ICECC) at Tagore Engineering College, Chennai, on 12th & 13th March 2019.
- 9. Preethi.A, Rajathakshini.C, Vaishnavi.H, **Porselvi.R**, "Bayesian-Based Trust Management for Insider Attacks in Military force", Proc. International Conference on Electrical Communication and Computing (ICECC) at Tagore Engineering College, Chennai, on 12th & 13th March 2019.
- 10. Porselvi.R, Murugan.M, "Performance analysis of Channel parameters using CR-WSN in Wireless Communication" National Conference on Recent Advances in Science, Engineering and Management NCRASEM, in Tagore Engineering College on 28th March 2018.
- 11. V.Nadhiya, R.Porselvi, "An Approach for Protecting against Communitarian Assaults by Malvolent Hubs in Manets", National Conference on Recent Advances in Science, Engineering and Management - NCRASEM, in Tagore Engineering College on 28th March 2018.
- 12.G.Priyanka, S.Rohini, V.Sandhiya, **R.Porselvi**, "Highly Secured Data Transmission Using Cryptography", National Conference on Recent Advances in Science, Engineering and Management NCRASEM, in Tagore Engineering College on 28th March 2018.
- 13.M.Barani, S.Sangeetha, J.Sathya, **R.Porselvi**, "Fleet Pathway Tracking and Management System Using IOT", National Conference on Recent Advances in Science, Engineering and Management NCRASEM, in Tagore Engineering College on 28th March 2018.
- 14. **Porselvi.R**, Murugan.M, Nathinipriyanka.R, "Parameter Analysis of Channel Estimation using Training Sequences" Proc. IEEE Sponsored 2nd International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS"15), at Karpagam College of Engineering, Coimbatore, Tamil Nadu, 19th 20th March 2015.
- 15. **Porselvi.R**, Niraimathi.R "Performance Comparison of Different Channel Estimation Techniques for Orthogonal Frequency Division Multiplexing (OFDM) Systems", Proc. International Conference on Electrical Communication and Computing (ICECC) at Tagore Engineering College, Chennai, on 13th & 14th March 2014.
- 16. Porselvi.R, Kavitha.R and Jayashri "Area Efficient Network-on-Chip Router In Packet switching", Proc. International Conference on Electrical Communication and Computing (ICECC) on 13th &14th March 2014 at Tagore Engineering College, Chennai.
- 17. Surekha.N, Porselvi.R and Kumuthapriya K, "An Efficient High Speed Wallace Tree Multiplier", Proc. International Conference on Information Communication & Embedded Systems (ICICES"13) organized by the Department of PG Students in

- Engineering at S.A. Engineering College, Chennai, pp.84, ISBN:978-93-82880-03-5, 2013.
- 18. Banupriya.R, Hemalatha.S and **Porselvi.R**, "High performance fault detection scheme for AES using composite field", Proc. National Conference on Computer and Communication Technologies (NCCCT) organized by DMI College of Engineering, Chennai, 5th April 2013.
- **19.**Priya.R, **Porselvi.R** and Kumuthapriya K, "Long-Distance Real-Time Echo Cancellation and Double Speech Detection", Proc. International Conference on Electronics & Communication Engineering (ICECE-2012) organized by Sri Lakshmiammal Engineering College, Chennai, 6-7 April 2012.
- **20.** Aarthi.S **Porselvi.R**, kiruba.L, "Power Optimization in Iterative and Pipelined CORDIC Architecture", Proc. International Conference on Electronics and Communication Engineering (ICECE-2012) organized by Sri Lakshmiammal Engineering College, Chennai, 6-7 April 2012.
- 21. Aarthi.S, **Porselvi.R**, kiruba.L "Comparison of power in Iterative and Pipelined CORDIC Architectures", Proc. National Conference on Networking communication systems and signal processing (NCSSP'12) at Karpaga Vinayaga College of Engineering and Technology, Madhurantakam, on 6th March 2012.
- 22. Kumuthapriya.K, **Porselvi.R** and Priya.R, "Advanced Cryptography using Coupled Congruential Pseudorandom Generators", Proc. National Conference on Networking communication systems and signal processing (NCSSP'12), at Karpaga Vinayaga College of Engineering and Technology, Madhurantakam, on 6th March 2012.
- 23. Kumuthapriya. K and **Porselvi.R**, "Advanced Cryptography using coupled congruential pseudorandom Generators", Proc. National MultiConference on Innovative Computing Technology (NMICT'2011) at Tagore Engineering College, Rathinamangalam, Chennai, pp.296-299 on 18th April 2011.
- 24. Srivatsan.S, Karthick.A and **Porselvi.R**, "Implementation of Multiplexer based parallel Vedic multiplier in FPGA", Proc. National Conference on Microelectronics and Communication (NCMECT), at SRM University, SRM Nagar, Kattankulathur, Chennai,8th & 9th April 2009.
- 25. **Porselvi.R** and Jessitha, "An efficient BIST Architecture for Highpeed Memory Testing", Proc. National Conference on Wireless Technologies (NCWT-2008), at Adhiparasakthi Engineering College, Melmaruvathur, on 6th &7th Feb 2008.
- 26.**Porselvi.R** "An efficient BIST Architecture for High-Speed Memory Testing", National Conference on Multimedia Signal Processing and Broadband Technologies (NCSBT-2008) at B.S.A. Crescent Engineering College, Chennai, 9th &10th Jan 2008.

Books / Chapters Published

- Dr. R. Porselvi published a book chapter titled "IOT-BASED SURVEILLING SYSTEM FOR MULTIPLE AGRICULTURE LAND USING WSN" Futuristic Trends in IOT, e-ISBN: 978-93-6252-960-2,IIP Series, Volume 3, Book 8, Part 3, Chapter 1
- 2. **Dr. R. Porselvi** published a book titled " **Linear Integrated Circuits**" Charulatha Publications, in 2024. ISBN: 978-93-89970-92-0.
- 3. **Dr. R. Porselvi** published a book titled " **Futuristic Trends in IoT** " Iterative International Publication, in 2024 ISBN: 978-93-6252-960-2.
- **4. Dr. R. Porselvi** published a book titled " **Wireless Communication**" Scientific International Publishing House, in 2023. ISBN: 978-93-5757-312-2.

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Nil

Patent Applied / Published/Granted

- 1. **Dr. R. Porselvi** has filed and published a Patent "Artificial Intelligence Based Wireless Sensor Network for Distributed Agricultural Weather Station" on 30.6.2023.
- 2. **Dr. R. Porselvi** has filed and published a Patent "Development of Monitoring Devices for Cardiovascular Diseases using Machine Leaning Techniques" on 06.01.2023.
- 3. **Dr. R. Porselvi** has filed and published a Patent "Priority generator and the method there of by implementing Artificial Intelligence for diagnosing patients in hospitals" on 25.03.2022.
- 4. **Dr. R. Porselvi** has filed and published a Patent Title on "Monitoring of Body Temperature with alert through IoT without contact to the human body during Covid situation" on 25.02.2022.

CITATIONS	62
H-INDEX	3

Sl.No University Supervisor ID / Reference 1 Anna University, Chennai

2	Number of UG Scholars Guided	42 Batches / 4127114
3	Number of PGScholars Guided	12 / 4127114
4	Number of Ph.D. Scholars Guided	
5	Number of Ph.D. Scholars Pursuing	
	PROFESSIONAL SOCIETY I	MEMBERSHIP DETAILS
CLAT		
Sl.No	Professional Society Name	Member ID
1.	Professional Society Name ISTE	Member ID LM 112481
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1.	ISTE	LM 112481