Dr. A.R.ARAVIND., M.Tech, MISTE, Ph.D.

Email: **aravind.a.r.ece@psvpec.in**
Plot No1A-S2,
Anugrapha Apartments,
Gokul Street, Kattabomman Nagar,
Zameen Pallavaram -43

CAREER OBJECTIVE

A fast learner and self-starter with good communication skills combined with skills repertoire. Would prefer a growth oriented position where my creative talents and innovative capabilities can be efficiently utilized.

PROFESSIONAL EXPERIENCE

- Working as an Associate Professor in Prince Shri Venkateshwara Padmavathy Engineering College Chennai from June 2024 to till date.
- Working as an Assistant Professor in Prince Shri Venkateshwara Padmavathy Engineering College Chennai from June 2010 to June 2024
- Worked as a Lecturer in Apollo Engineering College Chennai from July 2010 to October 2010.
- Worked as a VLSI Design Engineer in FABMAX Semiconductor Pvt Ltd Chennai from July 2007 to May 2008

EDUCATIONAL QUALIFICATIONS

- **Ph.D. (WSN),** Sathyabama Institute of Science and Technology, Chennai in June 2022
- **M.Tech (VLSI Design)**, Sathayabama University, Chennai in 2010 secured first class with distinction.
- **BE (Electronics & Communication Engineering)**, Anna University in 2007, secured first class.

RESEARCH INTEREST

- **Wireless Sensor Networks**

LIST OF PUBLICATIONS
INTERNATIONAL JOURNALS

1. Natarajan, S.K., Rathinasabapathy, R., Narayanasamy, J., Aravind, A.R. (2023). Biometric user authentication system via fingerprints using novel hybrid optimization tuned deep learning strategy. Traitement du Signal, Vol. 40, No. 1, pp. 375-381. https://doi.org/10.18280/ts.400138 **(SCI - E Indexed)**

2. Aravind, A.R., Chakravarthi, R. (2021). Fractional rider optimization algorithm for the optimal placement of the mobile sinks in wireless sensor networks. International Journal of Communication Systems, 34(4): e4692.https://doi.org/10.1002/dac.4692 **(SCI -E Indexed/Annexue - I)**

3. Aravind, A.R., Chakravarthi, R. (2021)."Adaptive Optimization for Optimal Mobile Sink Placement in Wireless Sensor Networks", The International Arab Journal of Information Technology (IAJIT), Volume18, Number 05, pp. 20 - 26, doi: 10.34028/iajit/18/5/3. **(SCI-E Indexed/Annexue - I)**

4. Aravind, A.R., Chakravarthi, R. (2023). Optimal Placement of Mobile Sink in Wireless Sensor Network Using Adjacency Based Cell Score Factor. International Journal of Intelligent Engineering and Systems, Vol.14, No.2, 2021. DOI: 10.22266/ijies2021.0430.03 **(SCOPUS Indexed)**

5. M. Shanmuganathan, S. Sandeep, P. Hosanna, A.R. Aravind, Sarika, C.A. Jyothirmayee, Improving the cooling performance of the straight finned heat sink (SHS) for computer processor using an inorganic PCM, Materials Today: Proceedings, Volume 69, Part 3, 2022, Pages 749-753, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2022.07.156. **(SCOPUS Indexed)**

6. Natarajan, S.K., Rathinasabapathy, R., Aravind, A.R. Arun .T (2023). An Automated Fingerprint RecognitionModel With Optimized Deep Learning Model: A Meta-Heuristic Approach. Scandinavian Journal of Information Systems,DOI: 34(2), 3-38 10.5281/SJIS.775173 **(ESCI Indexed)**

7. Aravind, A. R.; S., Bharati; G., Geethalakshmi, "Automatic detection of the wind turbine blade surface cracks based on image segmentation International Journal of Early Childhood Special Education (INT-JECSE) DOI:10.9756/INTJECSE/V14I5.20 ISSN: 1308-5581 Vol 14, Issue 05 2022

8. Aravind, A. R.; S., Vidyasagar; K., Karthick, "Diabetic Detection Using Iris Images" International Journal of Early Childhood Special Education (INT-JECSE) DOI:10.9756/INTJECSE/V14I5.30 ISSN: 1308-5581 Vol 14, Issue 05 2022

9. Yuvaraj, S.; Murali, M. J.; Aravind, A. R.; Kalapriyadharshini; Pragith, S., "High Performance Rca For Vlsi Design" International Journal of Early Childhood Special Education (INT-JECSE) DOI:10.9756/INTJECSE/V14I5.147 ISSN: 1308-5581 Vol 14, Issue 05 2022 **(UGC Indexed)**

10. Dr. S. Yuvaraj, Ph. D, Dr. K.K. Senthilkumar, Ph. D, Dr. K. Senthamil Selvan, Ph. D, Dr.A.R.

Aravind.,Ph. D, "High Performance Ripple Carry Adders In Vlsi Design" International Journal of Creative Research Thoughts (IJCRT), Volume 10, Issue 6 June 2022.

11. N. Senthil kumar, R.Ramadevi, AR.Aravind, J.T. Arun Raghesh "An Automated Fingerprint Recognition Model With Optimized Deep Learning Model: A Meta-Heuristic Approach" Neuro Quantology Volume20 ,Issue 20 ,Page 1632-1640,doi: 10.48047/NQ.2022.20.20.NQ109167 2022

NATIONAL JOURNALS

1. Anusha P, Madhuvanthi K, And Aravind A.R. "Power Efficient Processor For Predicting Ventricular Arrhythmia Based On Ecg" Internation Journal Of Advance Research And Innovative Ideas In Education Volume 3 Issue 2 2017 Page 2229-2234

2. K.Muhil, And P.Mohaneshwaran. "Mobile Technology For Deaf Without Surgery Using Tms320" Internation Journal Of Advance Research And Innovative Ideas In Education Volume 3 Issue 2 2017 Page 2557-256

3. C.Ezhilarasi, R.Jeyameenachi, And A.R.Aravind. "A Raspberry Pi Based Assistive Aid For Visually Impaired Users" Internation Journal Of Advance Research And Innovative Ideas In Education Volume 3 Issue 2 2017 Page 2710-2715

4. M J Murali , A R Aravind , P Ashok , And P S Dinesh . "Energy Harvesting Using Automobile Chargers With Wireless Power Transfer" Internation Journal Of Advance Research And Innovative Ideas In Education Volume 3 Issue 4 2017 Page 1385-1390

5. K.Abhinaya, K.R.Nivetha, And A.R.Aravind. "Implementation Of Security Enhanced Authentication System In Atm" Internation Journal Of Advance Research And Innovative Ideas In Education Volume 3 Issue 2 2017 Page 2039-2044

6. A.R.Aravind K.Muhil, And P.Mohaneshwaran. "Mobile Technology For Deaf Without Surgery Using Tms320" Internation Journal Of Advance Research And Innovative Ideas In Education Volume 3 Issue 2 2017 Page 2557-2561

INTERNATIONAL CONFERENCES

1. A R. Aravind, R. Chakravarthi and N. A. Natraj, "Optimal Mobility based Data Gathering Scheme for Life Time Enhancement in Wireless Sensor Networks," 2020 4th International Conference on Computer, Communication and Signal Processing (ICCCSP), Chennai, India, 2020, pp. 1-5, doi: 10.1109/ICCCSP49186.2020.9315275.(IEEE Xplore) **(Scopus Indexed)**

2. G. Kalanandhini, A.R. Aravind, G. Vijayalakshmi, J. Gayathri, K. K. Senthilkumar; Bluetooth technology on IoT using the architecture of Piconet and Scatternet. AIP Conference Proceedings 19 May 2022; 2393 (1): 020121. https://doi.org/10.1063/5.0074188. **(Scopus Indexed)**

3. K.K. Senthilkumar, G.Kalanandhini, A.R. Aravind, G. Vijayalakshmi, J.Gayathri; Image fusion based on DTDWT to improve segmentation accuracy in tumour detection. AIP Conference Proceedings 19 May 2022; 2393 (1): 020120. https://doi.org/10.1063/5.0074183. **(Scopus Indexed)**

4. A.R. Aravind, K.K. Senthilkumar, G. Vijayalakshmi, J. Gayathri, G. Kalanandhini; Study on modified booth recoder with fused add-multiply operator. AIP Conference Proceedings 19 May 2022; 2393 (1): 020139. https://doi.org/10.1063/5.0074212. **(Scopus Indexed)**

5. J. Gayathri, K.K. Senthilkumar, G. Vijayalakshmi, A.R. Aravind, G. Kalanandhini; Multi-purpose unmanned aerial vehicle for temperature sensing and carbon monoxide gas detection with live aerial video feeding. AIP Conference Proceedings 19 May 2022; 2393 (1): 020124. https://doi.org/10.1063/5.0074193 **(Scopus Indexed)**

6. G. Vijayalakshmi, J. Gayathri, K.K. Senthilkumar, G. Kalanandhini, A.R. Aravind; A smart rail track inspection system. AIP Conference Proceedings 19 May 2022; 2393 (1): 020122. https://doi.org/10.1063/5.0074206 **(Scopus Indexed)**

7. Aravind, A.R. Rithubharathan, S. Sanjaikumar, P.V.M. Vasudevan, N. Avudaiappan, T. Medibot for Emergency Vehicle E3S Web of Conferences, 2023, 399, 01012 **(Scopus Indexed)**

8. Chandra, R. Sanjaya, K. Aravind, A.R. Gulrukh, R. Kumar, T.S.S. Algorithmic Fairness and Bias in Machine Learning Systems E3S Web of Conferences, 2023, 399, 04036 **(Scopus Indexed)**

9. M. I. Habelalmateen et al., "Fog Computing in IoT: Architecture, Applications, and Research Challenges," 2023 International Conference for Technological Engineering and its Applications in Sustainable Development (ICTEASD), Al-Najaf, Iraq, 2023, pp. 172-176, doi: 10.1109/ICTEASD57136.2023.10584842. .(IEEE Xplore) (Scopus Indexed)

10. N. M, N. Sharma, K. S. Bhuvaneshwari, A. Aravind, S. R. Rathi and U. M. Daivagna, "Enhancing Robustness of Time Series Predictions with Deep Learning Techniques," 2023 2nd International Conference on Futuristic Technologies (INCOFT), Belagavi, Karnataka, India, 2023, pp. 1-6, doi: 10.1109/INCOFT60753.2023.10425765. .(IEEE Xplore) **(Scopus Indexed)**

11. S. G, S. K. Prasad, S. A, M. V. Ghamande, A. R. Aravind and M. Sharma, "Influence of Unbalance on Tyre Pressure Monitoring System Based on C-GRU Approach," 2023 7th International Conference on Electronics, Communication and Aerospace Technology (ICECA), Coimbatore, India, 2023, pp. 565- 570, doi: 10.1109/ICECA58529.2023.10395599. .(IEEE Xplore) **(Scopus Indexed)**

12. Natarajan, S.K., Rathinasabapathy, R., Baskar Gopal., Aravind, A.R. (2023). OLFV: Harnessing the Power of Enhanced Deep Learning Model to Recognize Fingerprints using Optimization and Classification Principles Paper 2024 International Conference on Advances in Data Engineering and Intelligent Computing Systems (ADICS), .(IEEE Xplore) **(Scopus Indexed)**

13. V. Janakiraman, S. D, A. R. Aravind, D. Nesakumar A, P. Sahitya and J. P. M, "Cutting-Edge Technology: An Intelligent Channel Allocation and Spectrum Sensing Procedures Over 5G Heterogeneous Networks," 2024 International Conference on Intelligent Systems for Cybersecurity (ISCS), Gurugram, India, 2024, pp. 1-6, doi: 10.1109/ISCS61804.2024.10581144. .(IEEE Xplore) (Scopus Indexed)

14. A. R. Aravind, M. Prajapati, E. Arunkumar, R. Kumar, H. Kumar and S. P. V. S. Rao, "A Way of Optimization of Wireless Sensor Network using TSCH," 2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), Greater Noida, India, 2024, pp. 326-330, doi: 10.1109/ICACITE60783.2024.10616840.(IEEE Xplore) **(Scopus Indexed)**

15. N. Pol., G. D. Rede, S. Agarwal, S. Sanjeera, A. R. Aravind and G. Kumar, "Online Transaction Fraud Detection: Exploring the Hybrid SSA-TCN-BiGRU Approach," 2024 2nd World Conference on Communication & Computing (WCONF), RAIPUR, India, 2024, pp. 1-6, doi: 10.1109/WCONF61366.2024.10692254.(IEEE Xplore) **(Scopus Indexed)**

16. Nithish B, Vamsinaath K, A. R. Aravind, " Industrial Control System-Anomaly Detection Datasets ," 2025 8th National Level Conference on Emerging Trends in Artificial Intelligence and Network Security, 2025, pp. 70-75, ISBN: 978-81-956102-4-2

17. A. R. Aravind and Rithwik Krishnan A, " Emergency Evacuation System For Clogging free and Nearest-Safe Path Navigation With IoT Based WSNS," 2025 8th National Level Conference on Emerging Trends in Artificial Intelligence and Network Security, 2025, pp. 83-87, ISBN: 978-81-956102-4-2

PATENTS DETAILS

1. Implementing The Generation of Electricity Using Food Waste Based on Bio-Energy, Prof. Kala Priyadarshini G Prof. Murali M. J Dr. Aravind A. R Prof. Santhosh Kumar C Prof. N. Divya Application No. 202241039427 Patent published on 22.07.2022

2. Digital Scent Technology Dr.J.Joyce Jacob Aravind G Chittumothu Pavankumar Prof. S Madhumathi Dr.R.Punithavalli, Application No. 202241043644 Patent published on 19.08.2022

3. Eco Friendly Dustbin Dr.A.R.Aravind R.Salini N.Varsha Prof.R.Shanmugapriya Dr.S.Sara, Application No. 202241045040 Patent published on 19.08.2022

4. Smart Walking stick Dr.A.R.Aravind Prof. A Benila P N.Jyothi Saai Raam, Application No. 202241046960 Patent published on 16.09.2022

5. Embedded System Based Ocean Monitoring And Information Gathering System A.R. Aravind et all Application No. 202141040168 A Patent published on 04/09/2021

BOOK CHAPTER

1. A.R. Aravind, J.T. Arun Raghesh and Dr. V. Balamurugan titled "Beginning Growth Detection Scheme Using HSV Algorithm" of published book entitled "Emerging Trends in Medical Sciences (Volume - 3)" having ISBN 978-93-93502-16-2.

2. S. Deepajothi, J B. Karthikeyan Dr. C. Senthil Selvi A. R. Aravind titled " Quantum Computing and Machine Learning for Advanced Cybersecurity Solutions" of published book entitled " Modern SuperHyperSoft Computing Trends in Science and Technology ". DOI: 10.4018/979-8-3693-6875-6.ch012.

WORKSHOP/FDP

1. Participated five days online Faculty Development Programme on "Advanced Power Electronics & Intelligent Control for Sustainable Electric Mobility And Renewable Energy Systems" held on 05.05.2025 to 09.05.2025 organized by Sri Sairam institute of technology

2. Participated six days Faculty Development Programme on "Emerging Trends and Technologies in Renewable Energy for Sustainable Development" held on 10.2 2025 -15.2. 2025 organized by AICTE Training And Learning (ATAL) Academy at Prince Shri Venkateshwara Padmavathy Engineering College

3. Participated five days Faculty Development Programme on "Hybrid and electric vehicle Technology" held on 15.7 2024 -20.7. 2024 at Prince Shri Venkateshwara Padmavathy Engineering College

4. Attend the course in "Embedded Systems & IOT" held on 9.7.2024-7.11.2024 organized by Shakra Innovations at Prince Shri Venkateshwara Padmavathy Engineering College

5. Participated six days Faculty Development Programme online on "Artificial intelligence and its applications" held on 03.07.2023 to 08.07.2023 organized by Chalapathi Institute of Technology

6. Participated six days Faculty Development Programme on "Hands on training on data science tools" held on 23-28 Jan 2023 organized by AICTE Training And Learning (ATAL) Academy

7. Attend seven days Course on "Supervisory control and Data Acquisition" held on 23.12.2022-30.12.2022 organized by Sri Eshwar College of Engineering, Coimbatore

8. Participated five days Faculty Development Programme online on "Powering IOT using Arduino/Rasperry PI" held on 19.9.2022-23.09.2022 organized by Nan Mudalvan

9. Participated six days Faculty Development Programme on "Application of Machine Learning and Deep Learning, Vel Tech Multitech Engineering College, Chennai, during 1.8.2022-7.8.2022

10. Participated six days Faculty Development Programme online on "AICTE Training And Learning (ATAL) Academy FDP on Quantum Computing, Sathyabama Institute of Science and Technology, Chennai, during 18-1-2021to 22-1-2021

11. Participated six days Faculty Development Programme online on "Emerging Trends in Data Science & IoT", Organized by Department of ECE, ARKA University, during 20-07-2021 to 25-07-2021

12. Participated six days Faculty Development Programme online on "IoT powered solutions for Healthcare Innovations", organized by KCG College of Technology, Chennai, during 30.11.2020 to 05.11.2020.

13. Participated six days Faculty Development Programme online on "Digital Teaching Aids and Virtual Learning", organized by School of Electrical and Electronics, Sathyabama Institute of Science and Technology, Chennai, during 15.06.2020 to 20.06.2020.

14. Participated five days Faculty Development Programme online on "Recent trends in Computer Architecture, VLSI and Embedded Systems", Organized by Department of ECE Gokaraju Rangaraju Institute of Engineering and Technology, during 09-06-2020 to 13-06-2020

15. Participated four days Faculty Development Programme online on "Machine learning for Signal Processing and VLSI", Organized by Department of ECE, ANURAG University, during 05-06-2020 to 08-06-2020.

16. Participated six days Faculty Development Programme online on "Machine Learning and Deep Learning Techniques for Computer Aided Interpretation (MATLAB, PYTHON)", organized by School of Electrical and Electronics, Sathyabama Institute of Science and Technology, Chennai, during 18.5.2020 to 23.5.2020

PROFESSIONAL MEMBERSHIPS

➢ Active Member, Indian Society for Technical Education (ISTE LM 109796) – Since 2016

GOOGLE SCHOLAR ID

➢ https://scholar.google.com/citations?user=oPBvjccAAAAJ&hl=en

SCOPUS ID: 57723584900

ORCID ID: 0000-0002-3965-2132

TECHNICAL TOOLS

➢ Orcad
➢ Xilinx
➢ Microwind
➢ Model Sim
➢ Cadence
➢ IAR Embedded Workbench
➢ Tinker CAD
➢ Tanner

SUBJECTS HANDLEED

- Digital Electronics with Lab
- VLSI Design with Lab
- Electronics circuits I with Lab
- Electronics circuits II with Lab
- Linear Integrated Circuits with Lab
- Signals and systems
- Digital Signal Processing
- Embedded and Real Time Systems with Lab
- Digital Image Processing
- Electronics System Design Lab
- Ad hoc and Wireless Sensor Networks
- DSP Architecture and Programming

PERSONAL PROFILE

Father's Name   :   Mr.A.RamaSwamy

Date of Birth   :   21-07-1986.

Sex   :   Male

Marital Status   :   Married

Permanent Address   :   3/10 Thattanvilai,
                                NorthSurankudy post,
                                K.K District-629501.

Languages Known   :   Tamil and English

AFFIDAVIT

I hereby declare that the information and facts stated herein are true and correct to the best of my knowledge and belief.

Place   :
Date   :   **A.R.ARAVIND**