

FACULTY PROFILE FORMAT (Format 3)		
Staff Name	:	Dr.S.Aghalya
Faculty ID	:	TEC25
Designation	:	Associate Professor
Qualification	:	M.E., Ph.D
Teaching Experience	:	28 years and 5 months
Area of Specialization	:	Wireless networks, Optical Communication
Subjects Handled	:	Communication Networks Digital Communication Electron Devices and Circuits Linear Integrated circuits Digital Principles Mobile communication Ad-hoc and Wireless sensor networks Signals and systems Wireless Communication Digital signal processing Optical communication Satellite Communication Multimedia compression techniques High performance communication networks Advanced Digital System Design Wireless Networks Radar Systems
Journals Published	:	<ol style="list-style-type: none"> 1. Aghalya,S 2024, ‘Cloud based prediction of epileptic seizures using real-time electroencephalograms analysis’ International Journal of Electrical and Computer Engineering, VOL.15, No.5. 2. Aghalya,S 2024, ‘Enhanced Algorithm for for accurate identification of water bodies in Satellite Imagery’, Journal of Xidian University, ISSN No:1001-2400, vol.18, issue 5. 3. Aghalya,S 2023, ‘Prediction of link failure and optimal route in MANET using Fuzzy linear Regression’, Intelligent Automation and Soft Computing, IASC, 2023, vol.36, no.2. 4. Aghalya,S 2021 ‘Intelligent Ambulance with Health Monitoring’, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, e-ISSN: 2278 – 8875, p-ISSN: 2320 3765 Volume 10, Issue 4, April. 5. Aghalya, S 2020, ‘A Surveillance System for Air Pollution Monitoring-Warning’, International Journal of Innovative Technology and Exploring Engineering, ISSN: 2278-3075 (Online), Volume-10 Issue-1, November. 6. Aghalya, S 2013, ‘Design of Vertical Handoff Initiation and Decision Algorithm in Heterogeneous Wireless Networks’,

		<p>International Review on Computers and Software, ISSN: 1828-6003, vol. 8, no. 10, pp. 2379-2388, October.</p> <ol style="list-style-type: none"> 7. Aghalya, S 2013, 'An Optimized Vertical Handoff Decision Algorithm based on Mobility Prediction in Heterogeneous Wireless Networks', European Journal of Scientific Research, ISSN 1450-216X, Vol. 94, No. 2, pp. 177-185, January. 8. Aghalya, S 2012, 'Prediction based Vertical Handoff Decision Algorithm in Heterogeneous Wireless Networks', International Journal of Computer Science and Engineering Technology, ISSN 2231-0711, vol. 2, issue 1, pp. 813-816, January. 9. Aghalya, S 2010, 'An Efficient Decision Algorithm for Vertical Handoff across 4G Heterogeneous Wireless Networks', International Journal of Computer Science and Information Security, ISSN 1947-5500, vol. 8, no. 7, pp. 124-127, October.
Conferences	:	<ol style="list-style-type: none"> 1. IoT-Enabled Weather Monitoring and Rainfall Prediction using Machine Learning Algorithm Indhumathi, S, Aghalya, S., Smitha, J.A., Aarthi M, P. Proceedings of the 2023 2nd International Conference on Augmented Intelligence and Sustainable Systems, ICAISS 2023, 2023, pp. 1491–1495. 2. Wireless Sensor Network Based Greenhouse Monitoring Using Cloud Integration with Data Analytics Praveena, M. Babiyola, A. Aghalya, S. Sasikar, A. Proceedings of the 2nd International Conference on Edge Computing and Applications, ICECAA 2023, 2023, pp. 68–72. 3. Reconfigurable Fault Current Detection System Using IoT Latha, P., Kaviyarasan, K., Leo Manickam, J.M., Jancee, B.V., Aghalya, S. Proceedings of the 2nd International Conference on Edge Computing and Applications, ICECAA 2023, 2023, pp. 1390–1395. 4. 5G-Enabled V2X Communication with Cloud-Powered XGBoost Algorithm for Electric Transportation, J.Gnana Jeslin, Sujatha.M, S.Aghalya, C.Jehan, Ishwarya M.V, Veda Sundara Vinayagam P, 10 th International Conference on Communication and Signal Processing 2024, pp. 1388-1393. 5. Advancements in Immunization Management for Personalized Vaccine scheduling with IoT and Machine Learning, M.Madheswaran, R.Dhanalakshmi, G.Ramasubramanian, S.Aghalya, Raju S, P.Thirumaraiselvan, 10 th International Conference on Communication and Signal Processing 2024, pp. 1566-1570. 6. Revolutionizing Railway Disaster Management with Cutting-edge IoT Technologies and Decision Tree Algorithm, Smitha J A, S.Aghalya, T.Vivekanandan, Nilamadhab Mishra, R.Vimalarasi, Vijayakumar Kadumbadi, 10 th International

		<p>Conference on Communication and Signal Processing 2024, pp. 1057-1062.</p> <p>7. Automotive CAN-Based Intelligent Collision Avoidance system using Machine Learning and Cloud Computing, P.Santhuja, C.Selvi, C.Jehan, S.Aghalya, B.Meenakshi, Mathivanan K, 10 th International Conference on Communication and Signal Processing 2024, pp. 1156-1161.</p> <p>8. Tele-Rheumatology-Advanced Neural Network Model for Remote Assessment and Management of Rheumatic conditions, S.Aghalya, R.Sarasu, Nilamadhab Mishra, G.Arunachalam, D.Gobinath, Suresh Babu T, 10 th International Conference on Communication and Signal Processing 2024, pp. 453-458</p>
Patent Published	:	<p>1. A smart portable safety gas monitoring system for drainage based on IoT published in the year of 2023.</p> <p>2. An IOT based Rain water quality monitoring system published in the year of 2022.</p>
Consultancy		AH2 LH Crashpad Assembly Pokayoke Fixture, CDCE Automation 2017.
WORKSHOP/ FDP/ STTP/ SEMINAR ATTENDED		<p>1. Kinematic analysis of Robot mechanisms- Fundamentals, IIT, Kancheepuram.</p> <p>2. Technology based Entrepreneurship Development Programme, AMET University.</p> <p>3. Machine Learning for Data science using Python, NIT, Warangal.</p> <p>4. .Digital image processing-A practical approach, Government Polytechnic college, Gandarvakottai.</p> <p>5. .Medical signal and Image analysis, St.Joseph's College of Engineering, Chennai.</p> <p>6. .Research scope in Remote sensing, St.Joseph's College of Engineering, Chennai .</p> <p>7. .Artificial intelligence and Data science, St.Joseph's College of Engineering, Chennai.</p> <p>8. Advanced Cyber Security, St.Joseph's College of Engineering, Chennai.</p> <p>9. Analytics and Machine Learning at SRM Institute & Tech, Chennai.</p> <p>10. Evolving trends in Communication and Networking, St.Joseph's College of Engineering, Chennai.</p> <p>11. For imparting additional information on Applied Statistics in Research, CAE, Anna University, Trichy.</p> <p>12. Multimedia streaming, CAE, Anna University, Trichy</p> <p>13. Research methodologies , CAE, Anna University, Trichy.</p> <p>14. Data Science and Analytics Tools, Dhanalakshmi College of Engineering, Chennai</p>