DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
STAFF PROFILE

Staff Name	**Dr. Adlin Sheeba**
Faculty ID	**TAM19**
Designation	**HOD & Professor**
Qualification	**M.E, Ph.D**

Teaching Experience	**22 Years**
Area of interest	**Web Service, ML, IoT**
Subjects Expertise	**Foundations of AI, ML, Distributed System, OOAD, DBMS, Human Computer Interaction.**
Books Published	**• Advanced Web Programming and Internet Technologies by Scientific International Publishing House, Nov 2021.** **• Mastering Data Science with Python by Sk Research Group of Companies, Aug 2024, ISBN: 978-93-6492-802-1.**
Journals published	**• AI-Powered Real-Time Runway Safety: UAV-Based Video Analysis with ICSO-Enhanced Deep Learning, International Journal of Computational and Experimental Science and Engineering, 11(1), pp. 1314-1329, Mar 2025. (Scopus) https://doi.org/10.22399/ijcesen.1184 Q3.** **• Automated Classification of Coloboma Subtypes Using InceptionV3 Algorithm on Optical Coherence Tomography Images, Journal of Information Systems Engineering and Management, 10(9S), Mar 2025, (Scopus), https://doi.org/10.52783/jisem.v10i9s.1173 Q4.** **• An efficient starling murmuration-based secure web service model for smart city application using DBN, Artificial Intelligence Review, 57(72), Feb 2024, (Scopus and SCIE), https://doi.org/10.1007/s10462-023-10689-9 IF: Scopus 11.674, WOS 8.139 Q1.** **• Multi-image fusion: optimal decomposition strategy with heuristic-assisted non-subsampled shearlet transform for multimodal image fusion, Signal, Image and Video Processing, 18(3), pp. 2297-2307, Feb 2024. (Scopus and SCIE), https://doi.org/10.1007/s11760-023-02906-3 IF: Scopus 1.966, WOS 2.157 Q2.** **• Secure smart city application using webservice model and mayfly optimization-based lightweight CNN, Transactions on Emerging Telecommunications Technologies, 35(1), Jan 2024. (Scopus and SCIE), https://doi.org/10.1002/ett.4869 IF: Scopus 3.414, WOS 2.638 Q2.** **• Swarm Intelligence Optimization for Resource Allocation in Cloud Computing Environments, ICTACT Journal on Soft Computing, 13(04), pp. 3048-3054, July 2023, DOI: https://doi.org/10.21917/ijsc.2023.0419, ISSN: 2229-6956. (UGC CARE)** **• Speech based Depression Analysis using Web Services and Convolutional Neural Networks, Journal of Pharmaceutical Negative Results, pp. 488-493, Feb 2023, https://doi.org/10.47750/pnr.2023.14.03.060 (Google Scholar)** **• Leukocytes Classification Using Convolutional Neural Network, Cardiometry, Issue 26. pp. 466-474, February 2023, DOI:10.18137/cardiometry.2023.26.466474. (Google Scholar)** **• An efficient fault tolerance scheme based enhanced firefly optimization for virtual machine placement in cloud computing, Concurrency and Computation: Practice and Experience, 35(7), pp. 1-22, Jan 2023, https://doi.org/10.1002/cpe.7610 (Scopus and SCIE) IF: Scopus 2.175, WOS 2 Q3.** **• Microscopic image analysis in breast cancer detection using ensemble deep learning architectures integrated with web of things, Biomedical Signal Processing and Control, 79(2), 2023, 104048, pp. 1-10, ISSN 1746-8094, Jan 2023 (Scopus and SCIE). IF: 5.1 Q1** **• An Efficient Galactic Swarm Optimization based Fractal Neural Network Model with DWT for Malignant Melanoma Prediction, Neural Processing Letters, 54(3), pp. 5043–5062, July 2022 (Scopus and SCIE) IF: Scopus 2.797, WOS 2.908 Q2** **• MKELM: Mixed Kernel Extreme Learning Machine using BMDA optimization for web services based heart disease prediction in smart healthcare, Computer Methods in Biomechanics and Biomedical Engineering, 25(10), pp. 1180-1194, Feb. 2022. (Scopus and SCIE) IF: Scopus 2.188, WOS 1.763 Q3** **• Enhancement of Energy Efficiency and Network Lifetime Using Modified MPCT Algorithm in Wireless Sensor Networks, Journal of Interconnection Networks, 22(3), Feb. 2022. (Scopus and ESCI) IF: 0.7 Q4** **• Analysis of Population Disease Estimates Using the Health Care Database, Bulletin of Environment, Pharmacology and Life Sciences, 11(5), pp. 197-202, April 2022. (WOS)** **• Pharmaceutical Chemistry is Changing the Way Medicines are Discovered and Developed, Bulletin of Environment, Pharmacology and Life Sciences, 11(6), May 2022. (WOS)** **• The Empirical Analysis for Effective Prediction of Crop Price using Neuro Evolutionary Algorithm, Journal of Physics: Conference Series, April 2022. (Scopus)** **• Dynamic Service Orient Target Analysis Model for Improved Intrusion Detection in Cloud, Design Engineering, 2021(8), pp. 1278-1289, Oct. 2021.** **• ESVM-SWRF: Ensemble SVM-based sample weighted random forests for liver disease classification International" Journal for Numerical Methods in Biomedical Engineering, 37(12), Aug. 2021. (Scopus and SCIE), pp. 1-16, https://doi.org/10.1002/cnm.3525 IF: Scopus 2.707, WOS 2.747 Q2.** **• "Developing an Attack Detection Framework for WSN-Based Healthcare Applications using Hybrid Convolutional Neural Network", Transactions on Emerging Telecommunications Technologies, 32(11), Aug 2021. (Scopus and SCIE), https://doi.org/10.1002/ett.4336 IF: Scopus 3.414, WOS 2.638 Q2.**

	• Traveller usage analysis for Indian Railways using cloud, European Journal of Molecular and Clinical Medicine, 7(6), pp. 1861–1866, 2020. (Google Scholar) • Genetic Disease Identification and Medical Diagnosis using MF, CC, BP, MicroRNA and Transcription Factors DAS J. Jensy Celestina, R. Karthiga, International Journal for Scientific Research & Development 6 (1), 2210-2212, 2018. (Google Scholar) • A Graph-Based Algorithm for Detection of Composition Loops Dynamically in Web Services, International Journal of Advanced Engineering Technology, Vol. 7, No.1, pp.748-750, 2016. (Google Scholar) • User Behavior Based Trust Estimation for Web Service Access Control Model, International Journal of Advanced Engineering Technology, Vol. 7, No.1, pp.791-796, 2016. (Google Scholar) • Android based motor control system (ABMCS), International Journal of Applied Engineering Research, 10(66), pp. 47–50, 2015. (Scopus) • User-centric Design for Semantic Discovery of Mathematical Web Services, American Journal of Applied Sciences, Vol.11, No. 4, pp.639-647, 2014. (Scopus) • User-centric Design for Mathematical Web Services, Advances in Human-Computer interaction, Vol. 2014, Article ID 436980, 8 pages, 2014. (ESCI and Scopus) IF: 2.9 Q2 • A Survey on Discovery and Ranking of Web Services, European Journal of Scientific Research, Vol. 99, No. 3, pp.394-400, 2013. (Scopus) • Semantically enriched OWL-S Files for Mathematical Web Services, International Journal of Computer Science and Engineering, Vol.1, No. 2, pp.1-5, 2013. (Google Scholar) • Blockchain Technology for Cyber-physical Systems, Emerging Trends for Securing Cyber Physical Systems and the Internet of Things, pp. 16, eBook ISBN9781003474111, 2024. (CRC Press) • Development of Future Wireless Communication-based IoT System, Computer Science Engineering and Emerging Technologies: Proceedings of ICCS 2022, pp. 38, 2024. (CRC Press) • Survey of risks and threats in online learning applications, Secure Data Management for Online Learning Applications, pp. 31-37, 2023. (CRC Press) • Tracking and Monitoring of Soldiers Using IoT and GPS. In: Ranganathan, G., Bestak, R., Fernando, X. (eds) Pervasive Computing and Social Networking. Lecture Notes in Networks and Systems, vol 475. https://doi.org/10.1007/978-981-19-2840-6_5 (Springer, Singapore) • Blockchain in internet of entities - issues and challenges, Editor(s): Sanjeevikumar Padmanaban, Rajesh Kumar Dhanaraj, Jens Bo Holm-Nielsen, Sathya Krishnamoorthi, Balamurugan Balusamy, Blockchain-Based Systems for the Modern Energy Grid, Academic Press, pp. 83-99, ISBN 9780323918503, https://doi.org/10.1016/B978-0-323-91850-3.00012-3, 2023 (Elsevier) • High Level Identification Using Palm Vein Based on Deep Neural Network. In: Ranganathan G., Bestak R., Palanisamy R., Rocha Á. (eds) Pervasive Computing and Social Networking. Lecture Notes in Networks and Systems, vol 317. https://doi.org/10.1007/978-981-16-5640-8_20, pp. 255-264, Jan 2022 (Springer, Singapore)
Conference / workshop attended	**18**
Funded Project Details	• TNSCST – Dissemination of Innovative Technology (DIT) sanctioned a fund of Rs. 50,000 on 01.04.2025 for the 3 days programme on “Empowering women in self-groups through training in thread bangles and Jhumka making with digital marketing skills”. • Mentor for 2 batches of students who submitted project under TNSCST Student Projects Scheme in the year 2021.
Ph.D Guidance	-
Patents	1. Edge-Enabled Bioelectric Skin Patch for Continuous Glucose Monitoring Application Number: 202421074008, CBR Number: 47725, Publication Date: 06/12/2024. 2. Artificial Intelligence-Driven Control System for High Voltage Gain BLDC Motors with Optimized Duty Cycle in Electric Vehicles, Application Number: 202421080460, CBR Number: 50313, Publication Date: 22/11/2024. 3. Combined PWM and Phase shift control method for bidirectional four switch buck-boost (FSBB) converter with smooth power transfer reversal, Application Number: 202441060537, CBR Number: 50642, Publication Date: 16/08/2024. 4. Smart Agriculture robot with AI to identify disease and plant health, Application Number: 202341054306, Publication Date: 01/09/2023. 5. IoT based smart home model for assisting elderly people Application Number: 202211037454, Publication Date: 05/11/2022. 6. Wireless Navigation Control For Prolong Seated Individuals In Native Language, Application Number: 202141059306, CBR Number: 47476, Publication Date: 31/12/2021. 7. Internet of Things (IoT) based monitoring system for agriculture, Application Number: 202041056142, Publication Number: 01/2021, CBR Number: 43586, Publication Date: 01/01/2021 8. Speed and Safety Monitoring Apparatus for Two Wheeled, Application Number:201941049148, Publication Number: 50/2019, CBR Number: 39440, Publication Date: 13/12/2019
Awards & Achievements	Received Academic Excellence Award 2020-2021 from TRP Publications