DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
STAFF PROFILE

Staff Name	**Deepa.R**
Faculty ID	TAM21
Designation	Assistant Professor
Qualification	M.E, (Ph.D)

Teaching Experience	11 Years
Area of interest	Digital Image processing, Machine Learning, Data Science Intelligence, Machine Learning
Subjects Expertise	Python Programming, Data Science, Data Analytics, Data Structures, Design and Analysis of Algorithms
Books Published	R. Deepa, SOFTWARE TESTING, REST Publisher, India, ISBN NO: 978-81-980264-7-7. Mrs. R. Deepa, Scientific International Publishing House (SIPH), Data Science, ISBN:978-93-6674-180-2
Journals published	1. **R. Deepa**, T. Sree Sharmila, R. Niruban, (2023)," Dynamic graph neural network-based computational paradigm for video summarization", Multimedia Tools and Applications, Springer Nature, ISSN: 1380-7501, DOI: https://doi.org/10.1007/s11042-023-17412-4, Vol 83, pp.51227–51250, Nov. (**SCI and Scopus Indexed**). **2.** R. Niruban, **R. Deepa**, Enhancing hyperspectral image classification with graph attention neural network, Journal of Electronic Imaging, Journal of Electronic Imaging, ISSN: 1017-9909, DOI: 10.1117/1.JEI.33.4.043052, https://doi.org/10.1117/1.JEI.33.4.043052, Vol 33, Issue 4, pp.043052-1 to 043052-25, Aug. (**SCI and Scopus Indexed**). 3. R. Niruban, **Deepa. R**," Optimized convolutional neural network-based comprehensive early diagnosis method for multiple eye disease recognition"Journal of Electronic Imaging, ISSN: 1017-9909, DOI: 10.1117/1.jei.31.4.043016, http://dx.doi.org/10.1117/1.jei.31.4.043016, Vol 31, Issue 4, pp.043016-1 to 043016-21, Jul. **(SCI and Scopus Indexed).** 4. Dr.R. Niruban, **Deepa.R**," Graph neural network-based remote target classification in hyperspectral imaging", International Journal of Remote Sensing, Taylor & Francis Group, Print ISSN: 0143-1161 Online ISSN: 1366-5901, DOI: 10.1080/01431161.2023.2237661, Vol 44, Issue 14, pp. 4465–4485, Jul 2023. (**SCI and Scopus Indexed**). 5. Dr.R. Niruban, **R. Deepa,** G.D. Vignesh, (2020), "A Novel Iterative Demosaicing Algorithm Using Fuzzy Based Dual Tree Wavelet Transform", Journal of Critical Reviews, Vol 7, Issue 9, pp.141-145, May, ISSN: 2394-5125**. (Scopus Indexed).** 6. Niruban, R.,SreeRenga Raja, T and **Deepa,R** (2015), "Similarity and Variance Of Color Difference Based Demosaicing", International Journal of Applied Engineering Research, 2014, 9(23), pp. 21657–21668 (**Scopus Indexed**). 7. Niruban, R.,SreeRenga Raja, T and **Deepa,R**, "Demosaicing of Images for Bayer CFA using Projection Algorithm", International Journal of Research in Engineering and Technology, Vol. 03, Issue. 05, pp. 408-414, May.eISSN: 2319-1163, 2014. 8. Niruban, R.,SreeRenga Raja, T and **Deepa,R** (2014), "Color Filter Array Demosaicing using Directional Color Difference and Gradient Method", International Journal of Technical Research and Applications, Vol.02, Issue. 04,pp.14-18, July, ISSN:2320-8163. 9. **Deepa,R.**, (2012) ,"Discovering Application Level Semantics For Data Compression Using HCT" ,International Journal of InnovativeTechnology and Exploring Engineering, ISSN:2278-3075, Vol. 01, Issue. 02,pp. 24-29, July. 10. B. Sasikumar, **R. Deepa**, Discovering Application Level Semantics for Data Compression using Hybrid Compression Technique, International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, Volume-2, Issue-3, pg.288-292, July 2012. 11. Baddeli sravya reddy, **R.Deepa,** S.Shalini, P.Bhagya divya," A Novel Machine Learning Based Approach For Detection And Classification Of Sugarcane Plant Disease By Using Dwt", International Research Journal of Engineering and Technology(IRJET),Vol-4,Issue-12,pp-843-846, Dec(2017),eISSN:2395-0056. 12. **R.Deepa** et al," Inspection of suspicious human activity in the crowd sourced areas captured in survillence cameras", International Research Journal of Engineering and Technology(IRJET),Vol-4,Issue-12,pp-802-806, Dec(2017), eISSN:2395-0056..
Conference / workshop attended	**9**
Funded Project Details	-
Ph.D Guidance	**-**
Patents	**• Artificial Intelligence Based Attack Prevention System for Cyber Physical Automotive System – 22/07/2022** **• Automatic Soil Moisture Sensor for Nursery Purposes – 19/08/2022** **• Integrated Disaster Response System. Identification of Safe Locations Using Machine Learning and Construction of Inflatable Smart Temporary Shelters – 21/08/2020** **• Transformer Architecture-Based Natural Language Processing for Contextual Real-Time Language Translation – 29/03/2024** **• Identifying the Language Present in Text or Image Using Visual Features Training Model – 20/03/2024**
Awards & Achievements	**Achieved Anna University Rank Holder in PG degree.**