Mohsin Furkh Dar, Ph.D.

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Google Scholar ResearchGate

Education

Nov 2020 – · · · · **Ph.D., University of Hyderabad** Computer Science.
Thesis title: *Advances in Deep Learning for Medical Image Segmentation and Classification*

Sept 2017 – Mar 2019 **M.Phil., Computer Science, Mewar University** in Computer Science.
Thesis title: *Performance Comparison of Face Detection and Recognition Algorithms*.

Mar 2013 – Jun 2016 **MCA, University of Kashmir**
Project Thesis title: *SMS Intimation System for Online Leave Management*.

Mar 2010 – Jan 2013 **BSc, University of Kashmir**
Majors: *Mathematics, Physics, Information Technology*.

Research Publications

Journal Articles

1. M. F. Dar and A. Ganivada, "Fuzzy rough set loss for handling boundary uncertainty in medical image segmentation," *IEEE Transactions on Emerging Topics in Computational Intelligence*, vol. Under Review,
2. M. F. Dar and A. Ganivada, "Multi-modal attentionnet for medical image classification with dual branch feature extraction and saliency maps," *IEEE Transactions on Medical Imaging*, vol. Under Review,
3. M. F. Dar and A. Ganivada, "Adaptive ensemble loss and multi-scale attention in breast ultrasound segmentation with uma-net," *Medical & Biological Engineering & Computing*, Jan. 2025, ISSN: 1741-0444. DOI: 10.1007/s11517-025-03301-5.
4. A. N. Alhaj, N. D. Patel, A. Singh, R. K. Bondugula, M. F. Dar, and J. Ahamed, "Design and analysis of a robust security layer for software defined network framework," *International Journal of Sensor Networks*, vol. 46, no. 1, pp. 1–14, 2024. DOI: 10.1504/IJSNET.2024.141613.
5. M. F. Dar and A. Ganivada, "Deep learning and genetic algorithm-based ensemble model for feature selection and classification of breast ultrasound images," *Image and Vision Computing*, vol. 146, p. 105 018, Jun. 2024, ISSN: 0262-8856. DOI: 10.1016/J.IMAVIS.2024.105018.
6. M. F. Dar and A. Ganivada, "Efficientu-net: A novel deep learning method for breast tumor segmentation and classification in ultrasound images," *Neural Processing Letters*, vol. 55, pp. 10 439–10 462, 2023. DOI: 10.1007/s11063-023-11333-x.
7. S. Mukhtar, M. F. Dar, and A. Kaur, "Latent fingerprint enhancement and matching using intuitionistic type-2 fuzzy," *International Journal of Artificial Intelligence and Soft Computing*, vol. 7, no. 4, pp. 313–328, 2022. DOI: 10.1504/IJAISC.2022.130558.
8. M. F. Dar and D. S. Dixit, "Performance comparison of face detection and recognition algorithms," *International Journal of Science and Research (IJSR)*, vol. 8, no. 1, pp. 986–994, Jan. 2019. DOI: 10.21275/ART20194439.

Conference Proceedings

1 M. F. Dar and A. Ganivada, "Dynamic weight adjusted ensemble loss for enhanced medical image segmentation," in *Proceedings of Fourth International Conference on Computing and Communication Networks*, G. Fortino, A. Kumar, A. Swaroop, and P. Shukla, Eds., Singapore: Springer Nature Singapore, 2025.

Employment History

2019 **Asst. Prof., Computer Science** at Govt Degree College Uri, Baramulla, J&K.

2022 – 2024 **Teaching Assistant** University of Hyderabad.

Skills

Coding	Python
Databases	MySQL.
Deep Learning	TensorFlow, Keras.
Machine Learning	Scikit-learn, NumPy, Pandas, SciPy, Seaborn.
Research Tools	MATLAB, LaTeX , Jupyter, PyCharm, Git, Docker, Mendeley, Zotero
Misc.	Academic research, teaching, training, consultation, LaTeX typesetting, and publishing.

Miscellaneous Experience

Teaching Assistant

2022 - 2024 Mentored **10+ IMTech and MTech students** in Deep Learning and Computer Vision.

Mentored two research assistants in projects on **Fuzzy Rough Kernel-Based Extreme Learning Machine and Mineral Prospectivity Classification using Deep CNNs**.

System Administrator

2021 - 2022 Worked as **System Admin** in **Artificial Intelligence Lab, School of Computer and Information Sciences, University of Hyderabad**.

Awards and Achievements

2019 **NTA UGC NET Exam**, Qualified UGC NET+JRF (Computer Science & Application) December 2019 AIR 53.

2017 Achieved District **Rank 1st** and State **Rank 3rd** in Programmer J&K Under Samagra Shiksha

Conference Presentations, Workshops & Service

2024 Presented paper "**Dynamic Weight Adjusted Ensemble Loss for Enhanced Medical Image Segmentation**" at ICCCNet-2024 conference held in Manchester, UK.

Volunteer, Transport Committee In-charge at the International Conference on BigData 2024, University of Hyderabad.

References

Available on Request