

Muhammad Ahmad

FAST, CS Depart.



“Narrated Mu’adh bin Jabal (RA): The Messenger of Allah (peace be upon him) as saying: If anyone’s last words are ”There is no God but Allah” he will enter Paradise. (Sunan Abi Dawud 3116, Book 21, Hadith 28)”

Research Interests

Machine Learning, Computer Vision, Remote Sensing, and Hyperspectral Imaging, Wearable Computing.

Education

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| Ph.D. with Con Lode – Messina University <i>Deep Learning for Hyperspectral Image Classification</i> | Messina, Italy Oct 2018 – Nov 2021 |
| M.S in Electronics Engineering – International Islamic University <i>Hyperspectral Unmixing and Target Detection</i> | Islamabad, Pakistan Sep 2008 – July 2011 |
| B.S in Mathematics – G.C University <i>Topological/Metric Space/ Mathematical Reasoning of Machine Learning Models</i> | Faisalabad, Pakistan Mar 2003 – Dec 2007 |

Professional Experience

Dec 2022 - To date: Associate Professor, National University of Computer and Emerging Sciences, Pak.
Mar 2023 - Dec 2023: Head of CS Department, National University of Computer and Emerging Sciences, Pak.
Aug 2020 - Dec 2022: Assistant Professor, National University of Computer and Emerging Sciences, Pak.
Mar 2019 - Aug 2020: Assistant Professor, Khwaja Fareed University of Engineering and Information Technology, Pak.
Oct 2018 to Nov 2021: Research Fellow (Volunteer), University of Messina, Messina, Italy.
Aug 2015 to Feb 2019: Teaching Instructor & Research Fellow, Innopolis University, Innopolis, Russia.
Mar 2012 to July 2015: Researcher at Knowledge-intensive Software Engineering (NiSE) Research Group, Korea.
Jun 2010 to July 2011: Research Assistant (Volunteer), International Islamic University, Pak.

Honors and Awards

2021-2023: Top 2% Scientists, List Prepared by Stanford University, Consecutive Years.
2021-2022: PI - Research Project on ”An Automated Tool to Assist Batch Advisors” worth 0.53M Pkr.
2019-2020: Employee of the Year, Khawaja Fareed University of Engineering & Information Technology, Pakistan
2017-2018: Employee of the Year, Innopolis University, Russia
2017-2018: Certified for Teaching Instructional Skills (ISW) – Innopolis University, Russia
2015-2019: Research Grant (4.80M Rubble), Innopolis University, Russia.

Associate Editor/Advisory Board Member

Computer Sciences & Mathematics, MDPI. [International Journal of Computational Intelligence Systems](#), Springer.
[Frontiers in Communications and Networks](#), Frontiers. [Frontiers in Artificial Intelligence](#), Frontiers. [PlosOne](#).

Selected Publications (I10-INDEX 52, H-INDEX 26).

- J_1 M. Ahmad, et.al., “WaveFormer: Spectral–Spatial Wavelet Transformer for HSIC”, IEEE Geoscience and Remote Sensing Letter, (IF. 5.343), **Accepted**, 2024.
- J_2 Q. Ran, et.al., “Deep Transformer and Few-shot Learning for Hyperspectral Image Classification”, CAAI Transactions on Intelligence Technology, (IF. 5.1), 2023.
- J_3 M. Ahmad, et.al., “A Disjoint Samples-based 3D-CNN with Active Transfer Learning for HSIC”, IEEE Transactions on Geoscience and Remote Sensing, vol. 60, pp. 1-16, (IF. 8.2), 2022. [Code](#)
- J_4 M. Ahmad, et.al., “HSIC - Traditional to Deep Models: A Survey for Future Prospects”, IEEE JSTARS, vol. 15, pp. 968-999, (IF. 5.5), 2022. [Code](#)
- J_5 S. K. Roy, et.al., “Hyperspectral and LiDAR Data Classification Using Joint CNNs and Morphological Feature Learning”, IEEE Transactions on Geoscience and Remote Sensing, vol. 60, pp. 1-16, (IF. 8.2), 2022.
- J_6 M. Ahmad, et.al., “A Fast and Compact 3-D CNN for Hyperspectral Image Classification”, IEEE Geoscience and Remote Sensing Letters, vol. 19, pp. 1-5, (IF. 5.343), 2021. [Code](#)