

MADEEHA TARIQ

Visiting Faculty | Computer Science | PhD Scholar
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PROFILE SUMMARY

Computer Science educator with over ten years of teaching experience at secondary and higher education levels. Currently serving as a Visiting Faculty Member at Air University, Islamabad, and pursuing a PhD in Computer Science. Holds an MS in Computer Science with expertise in Google Earth Engine, remote sensing, and satellite image processing. Actively engaged in research and academic writing, with strong skills in outcomes-based education, curriculum delivery, and student mentoring.

EDUCATION

- 1 PhD in Computer Science (In Progress), Air University, Islamabad — Coursework CGPA: 3.26/4.0
- 2 MS in Computer Science, COMSATS University Islamabad (Attock Campus), 2020 — CGPA: 3.38/4.0
- 3 MCS, Virtual University of Pakistan, 2016 — CGPA: 3.61/4.0
- 4 MA English Literature, University of the Punjab, 2011
- 5 Bachelor's Degree, University of the Punjab, 2005

TEACHING & PROFESSIONAL EXPERIENCE

- 1 Senior School Teacher (IT), School Education Department — 14 years of teaching experience.
- 2 Visiting Faculty Member, Air University, Islamabad.
- 3 Teaching experience at Indus Valley Public School, Attock (2 years).
- 4 Provided academic guidance and consultancy to international students from Australia (Queensland University, iHBC College, Sydney City College of Management).
- 5 International Coordinator, International School Award Project (British Council).

RESEARCH WORK

MS Thesis: Congestion-Aware Reward-Based Scheme for Delay Tolerant Networks in 6G-based Internet of Things for Emergency Evacuation. Research focuses on network performance optimization, intelligent routing, and congestion control. Currently extending research interests toward applied computer science, geospatial analysis, and intelligent data processing.

PhD Research Topic: Coastal Erosion Detection using Satellite Imagery

Publications: One research paper published; three research papers under review.

Congestion aware reward based scheme based on delay tolerant networks for emergency evacuation in 6G-based internet of things networks. (2023)

SKILLS

- 1 Core Computer Science: Data Structures & Algorithms (teaching-level), DBMS & SQL, Software Engineering Fundamentals, Computer Networks.
- 2 Technical & Research: Google Earth Engine (GEE), Remote Sensing & GIS, Landsat & Sentinel Data Processing.
- 3 Programming & Tools: Python, MATLAB, QGIS, ArcMap.
- 4 Academic Skills: Research Design, Academic Writing, Literature Review, Data Interpretation.
- 5 Teaching Skills: Outcomes-Based Education (OBE), Lesson Planning, Student Mentoring, Presentation Skills.

WORKSHOPS & CERTIFICATIONS

- 1 Python Programming (Beginner to Advanced), CPD Air University.
- 2 Academic Writing using LaTeX, Air University.
- 3 SPSS and Smart Research Tools, FAST University.

LANGUAGES

English, Urdu, Punjabi