RABBIA ABID

Highly motivated research candidate with a strong foundation in Information and Communication Technology (ICT) and a keen interest in Machine learning, AI and 5G or 6G. Having completed a Master's degree in Communication Systems and Networks at Tampere University Finland on a full scholarship, I am eager to deliver impactful, data-driven solutions that advance our interconnected world.

Contact Information

(+92) 315 0595098

rabbiawarraich65@gmail.com

House no 156 Block C
Street no 6 Media Town
Lohe Bher Islamabad, 45710
Islamabad, Pakistan

Language

- English
- Finnish (basic)
- Urdu

Skills

- Networking
- Python
- Matlab
- C++
- Machine learning

Experience

Network Engineer
National Telecommunication 2017 - 2019

- Network Support, Monitoring and Perform surveillance of Transmission Network (Huawei and ZTE).
- Monitoring Key Performance Indicators (KPIs) and Processing the planned activities of Optical Fiber

Quality of Service Engineer
Ufone 4G
2020 - 2023

- Assuring network quality by monitoring Ufone vital network parameters.
- Customer Complaints Trend Analysis to identify problematic areas for network improvement.
- Technical report writing upon project completion. Project Networking / Technical Support / Technical Report Writing

Education

Tampere University Finland
Master in Communication Systems and Networks
2023 - 2025

UET Taxila Pakistan
Bachelor of Science Electrical Engineering
2013- 2017
CGPA: 3.57/4

Research interests

Research interests include 5G/6G communication technologies and Artificial Intelligence/Machine Learning, with a focus on developing and applying data-driven methods to solve a wide range of scientific and applied research problems. This includes using AI/ML for modelling, prediction, optimisation, and decision-making, through rigorous, research-oriented work that turns algorithmic ideas into practical solutions. The focus is on applying data-driven intelligence to real research challenges where measurable improvements in performance, reliability, and outcomes can be achieved across different application areas.

Master's Thesis

Adaptive Beam selection in mmWave MIMO Systems using Multi Armed Bandit algorithms

In this project reinforcement learning-based MAB algorithms were used for beam selection in mmWave MIMO to reduce the training and signalling overhead that is caused by traditional approaches like exhaustive or hierarchical beam search approaches in high-mobility scenarios with high blockage probabilities.

Projects

Real time Implementation of OFDM using USRP

Incorporating the power of Software Defined Radio (SDR) and the flexibility of the Universal Software Radio Peripheral (USRP) this project implemented the OFDM modulation in real time validating the fundamental principles of OFDM modulation on hardware. This work aligns with the advancements in wireless communication, notably in 4G LTE technologies.