



Tariq Mahmood

Data Scientist & Machine Learning Expert

Tariqmahmood_16@hotmail.com



WORK EXPERIENCE

Sep2022-Present

Data Science and Machine Learning Lead

Sparktechus

♥ Lahore, Pakistan

I am working here as data scientist and my responsibilities are to manage the projects related to machine learning and quantum machine learning and provide different solutions to the industry problems.

Oct2023- Present

Assistant Professor

Centre for High Energy Physics,
University of the Punjab, Lahore

♥ Lahore, Pakistan

I am working here as Assistant Professor of Physics and my responsibilities are teach different courses and research at undergraduate and graduate level. Research areas include, high energy Physics, Particle physics data analysis, astroparticle data analysis, machine learning, quantum computing, and quantum machine learning.

Oct2015 – Oct2023

Lecturer

Centre for High Energy Physics,
University of the Punjab, Lahore

Lahore, Pakistan

I worked here as Lecturer of Physics and my responsibilities were teach different courses and research at undergraduate and graduate level. Research areas include, high energy Physics, Particle physics data analysis, astroparticle data analysis, machine learning, quantum computing, and quantum machine learning.

Jun2011 - May2013

Lecturer

Department of Computer Science,
GC University, Lahore

Lahore, Pakistan

I worked here as Lecturer and my responsibilities were to teach different courses and research at undergraduate and graduate level.

EDUCATION

Feb2015 - Aug2023

PhD High Energy Physics

♥ Lahore, Pakistan

Centre for high Energy Physics, University of the Punjab, Lahore.

Thesis: Neural network based study of charmonium spectrum.

Sep2009 - Jun2012

MS Computer Science

♥ Lahore, Pakistan

Government College University Lahore

Thesis: Modeling and Simulation of Quantum Cognitive Perceptual Associative Memory for Computer Vision using Unified Theory of Mind for Machine Consciousness

Sep2006 - Aug2008

MSc Computational Physics

♥ Lahore, Pakistan

Centre for high Energy Physics, University of the Punjab, Lahore.

Project: Microcontroller Based Digital Locking System.

Publications

Tariq Mahmood, Talab Hussain, Maqsood Ahmad: "Quantum Computer Architecture: A Quantum Circuit-Based Approach Towards Quantum Neural Network", published in PAS, year=2023.

Tariq Mahmood, Jumanah Ahmed Darwish, Talab Hussain, Maqsood Ahmad, Rehan Ahmed Khan Sherwani: "Solving Schrödinger Wave Equation for the Charmonium Spectrum Using Artificial Neural Networks", Published in Advances in High Energy Physics, IF=1.7, year=2024.

Muhammad Atif Khan, **Tariq Mahmood**, Ambreen Sarwar, Maria Faiq Javaid, Munawar Iqbal: "Prediction of Stock Market Movement Using Long Short-Term Memory (LSTM) Artificial Neural Network: A Case Study of KSE 100 Index", Published in Pakistan Journal of Life and Social Sciences, year=2024.

Hafiza Hina Ibraheem, Muhammad Rizwan Tariq, Shinawar Waseem Ali, Zujaja Umer, Zunaira Basharat, Azeem Intisar, **Tariq Mahmood** et al: "Assessing Nutritional Probing and Storage Stability of Functional Aloe Vera (Aloe barbadensis) based Guava Jam: A Machine Learning Approach for Predictive Modeling", Published in International Journal of Food Science: IF=3.0, 2024.

CONTACTS



Tariqmahmood_16@hotmail.com



+92 3214617186



<https://www.linkedin.com/in/tariq-mahmood-53a9a429/>



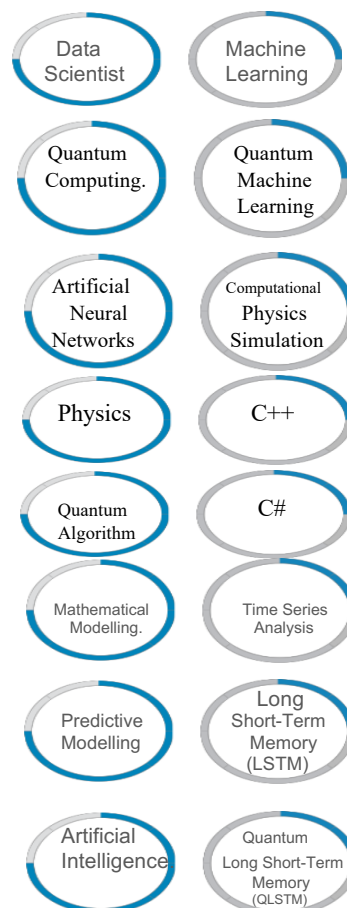
WHY ME?

I bring a unique combination of expertise in both classical and quantum machine learning, making me particularly well-suited for this role. With advanced skills in Python, TensorFlow, and PyTorch, I have successfully implemented various machine learning models, including Long-Short Term Memory (LSTM) networks for time series analysis and predictive modeling. My experience with Qiskit and Quantum Circuits allows me to leverage quantum computing for enhanced computational efficiency, particularly through Quantum Long-Short Term Memory (QLSTM) networks and Parametrized Quantum Neural Networks.

Additionally, my background in computational physics simulation and mathematical modeling complements my machine learning expertise, enabling me to address complex, multidisciplinary problems with a robust analytical approach. My ability to integrate artificial intelligence with quantum computing positions me to deliver innovative solutions, making me an ideal candidate to drive the success of your project.



SKILLS



Python
Artificial Intelligence
Qiskit
Tensorflow
Pytorch



LANGUAGES

English
Urdu

