Talha Asghar

Senior Software Engineer — Backend Development, AI/ML/DL Engineering Lead

Education

National University of Science and Technology - NUST

Expected Aug 2025

Masters of Science in Computer Science with specialization in AI (GPA: 3.88 / 4.00)

Islamabad, Pakistan

• Relevant Coursework: Artificial Intelligence, Machine Learning, Deep Learning, Big Data, Data Mining

Khwaja Fareed University of Engineering and Information Technology - KFUEIT

Sep 2021

Bachelors of Science in Computer Science (GPA: 3.88 / 4.00)

Rahimyar Khan, Punjab

 Relevant Coursework: Programming Fundamentals, Object Oriented Programming, Data Structures, Assembly Languages, Computer Architecture and Organization, Web Programming, Mobile App Development, Compiler Construction

Experience

Convergence Business Systems

Jan 2023 - continued

Senior Software Engineer

Islamabad, Pakistan (Remote)

- Responsible for maintaining and refactoring legacy code, ensuring system stability and improving performance while
 integrating new features. Collaborated with teams to troubleshoot and resolve complex issues, ensuring seamless
 operation of older systems and facilitating smooth transitions to newer technologies.
- Led a proficient team in the successful deployment of a Telecom Helpline Call Center solution for an international telecom company, facilitating seamless customer-agent interactions for complaint submissions. Additionally, spearheaded the development of a performance monitoring module to assess individual agent effectiveness, enhancing operational transparency and efficiency.
- Managed and administered all company servers, ensuring optimal uptime, security, and performance. Responsible for configuring, monitoring, and maintaining server environments, as well as automating system tasks to enhance efficiency and reduce downtime. Played a key role in scaling infrastructure to support growing business needs.

Nov 2021 - Jan 2023

Associate Software Engineer

Islamabad, Pakistan (Remote)

- Implemented an exceptionally efficient ETL pipeline that seamlessly integrates data from various sources, consolidating it into a robust Data Lake spanning approximately 60TB. This pivotal infrastructure enhancement has empowered our sales team, enabling them to execute queries with unparalleled efficiency and speed.
- Implemented comprehensive automation solutions for diverse server maintenance tasks, including real-time alerts for service disruptions and automated email reports for clients. This streamlined approach ensures proactive issue identification and swift resolution, bolstering overall system reliability and client satisfaction.

Rapidev Jun 2022 – Feb 2023

Machine Learning Engineer

National Software Technology Park, Islamabad (Contract - Hybrid)

• Developed an automated bot detection system using machine learning algorithms to identify and block fraudulent accounts on social platforms, leveraging and enhancing open-source solutions for improved accuracy and efficiency.

<u>Fiverr</u> Oct 2018 - Nov 2021

Freelance Programmer and Consultant

(Freelance)

• Successfully developed over 120+ projects for international clients, consistently earning a 5.0-star rating. A standout project was the creation of a comprehensive Clinic Management Solution for a private doctor in Germany, streamlining operations and improving patient care.

Bot Account Detection python, tensorflow, mysql, flask, neo4j

• Developed an automated bot detection system using machine learning algorithms to identify and block fraudulent accounts on social platforms, leveraging and enhancing open-source solutions for improved accuracy and efficiency.

Smart Time Table Scheduler python, mysql, flask, pyqt5

- Developed an automated Time Table Scheduler to efficiently create and manage conflict-free schedules for educational institutions.
- Designed an intuitive user interface allowing students and faculty to input preferences and constraints for personalized scheduling.

The Revivalists App android, kotlin, python, postgresql, graffana, prometheus, docker

- Volunteered for Mr. Qaiser Ahmed Raja to create a dedicated Instant Messaging platform tailored for their "The Revivalists" community, addressing concerns of bans and reports on their Whatsapp community and groups.
- I assisted in deploying the Synapse backend server for Element Messenger, ensuring seamless communication for the Revivalists community

Try it Out android, java, google cloud APIs, augmented reality

- Developed "Try it Out," an Android app that allows users to virtually try on shopping items before making a purchase, enhancing the online shopping experience.
- Integrated augmented reality (AR) technology to allow users to visualize products like clothing, accessories, and more, in a real-world setting.

Certifications

- Machine Learning Specialization by Stanford Online
- Deep Learning Specialization by deeplearning.ai
- Tensorflow Developer Professional Certificate by deeplearning.ai
- Meta Backend Developer Professional Certificate
- Meta Frontend Developer Professional Certificate
- Django for Everybody Specialization by University of Michigan
- Python for Everybody Specialization by University of Michigan

Technical Skills

Languages: Python, Javascript, Java, C / C++, Kotlin, PHP, C#

Technologies: Django, Flask, Fastapi, Tensorflow, React.js, Node.js, Android SDK, Linux **Concepts**: Neural Networks, Cloud Computing, Databases, Web and Mobile app development

Achievements

- Gold Medalist in Bachelors
- Runner Up Speed Programming Contest KFUEIT Tech Olympiad (2018)
- Winner Speed Programming Contest Fareed Innovation and Technology Event (2019)
- Lead a team to Regional Finals in ACM ICPC, GIKI Topi (2019)

Social Engagements

Cofounder: of CS Connect Pakistan

Community Member: at Islamic Messaging System (2023-)

Volunteer: at Revivalists Tech Team (Jan 2024-)