Muhammad Ayaan Qasmi

ayaan.qasmi@gmail.com | +966553502927 | LinkedIn: Ayaan Qasmi| GitHub: ayaanqasmi

EDUCATION

National University of Science and Technology, SEECS
Islamabad, Pakistan
B.Eng. in Software Engineering
Expected Graduation, May 2026

- **GPA:** 3.50/4.00
- **Related Coursework:** Data Structures & Algorithms, Design and Analysis of Algorithms, Software Design and Architecture**,** Object Oriented Programming, Databases, Operating Systems, Computer Networks, Statistics, Linear Algebra and Ordinary Differential Equations

EXPERIENCE

Kaamyaab.pk **Islamabad, Pakistan**
Co-Founder and Software Engineer *July 2024 – present*

- Engineered scalable, reusable frontend components for a Next.js web platform and Native app within a monorepo structure, while simultaneously building a robust backend from scratch using Next.js API routes.
- Architected and deployed a microservices infrastructure to integrate AI-driven recruitment features, enhancing the hiring process for both employers and students, hosted seamlessly on AWS.
- Partnered with the university's Industry Liaison Officer to successfully onboard multiple recruiters to the platform, strengthening the bridge between students and potential employers.

PROJECTS

Stock Trading App | Tensorflow, Flask

- Built an LSTM-based stock recommendation app with 65% accuracy, implementing design patterns (Factory, Adapter) and MVC architecture for maintainability.
- Developed the Flask backend and designed UML diagrams for sequence and use cases, collaborating closely with the frontend team for seamless integration.

PolicyPal | PyTorch, Hugging-face, JS

- Fine-tuned DistilBART with LoRa for high-accuracy legal document summarization, reducing computational overhead.
- Deployed a Chrome extension leveraging queuing and caching for efficient summarization of online terms and conditions.

Tennis Game Analyzer | YOLO, OpenCV, PyTorch

- Leveraged YOLOv8 for object detection, fine-tuned on custom datasets, and trained CNNs with PyTorch for keypoint extraction and object tracking across frames.
- Used OpenCV for video manipulation, applying a data-driven approach to analyze detection results, integrating multiple ML/DL models into a unified project

VANET Simulation | C++, ns3, Cisco Packet Tracer

- Led the development of advanced CSMA/CD-based networking protocols and safety algorithms using simulated RSUs in C++ to manage vehicle communication and prevent collisions in zero-visibility
- Utilized ns-3 and Cisco Packet Tracer to model, visualize, and analyze the performance of VANET systems, with a focus on collision avoidance and traffic management.

ACTIVITIES AND LEADERSHIP

Google Developers Student Club(GDSC) NUST
Event Head and MoC *Oct 2023 - Current*

- Spearheaded an event hosting a principal telecommunications Architect at RedHat**,** where I Interacted with all major branches in GDSC to ensure turn-up and execution
- Hosted and MoC'd the biggest tech event at NUST, TAG '24, ensuring a seamless crowd and speaker experience

SKILLS

Programming: Python, Pytorch, Tensorflow, OpenCV, YOLO, Flask, JS, TS, Node, React, Next, Express, MongoDB, PostgresSQL, SQL, C/C++, bash
Tools: VScode, AWS, Jupyter Notebooks, Git, Tailwind, Agile, Ns3, Cisco Packet Tracer, VirtualBox