

# Muhammad Ahmed

Los Angeles Metropolitan Area, CA, USA

ahmed.azhar2299@gmail.com | +1 (562) 577-5028 | linkedin.com/in/ahmedazhar2299 | github.com/ahmedazhar2299

## Education

### California State University, Long Beach

Expected Jun 2027

Master of Science in Computer Science (GPA: 4.0/4.0)

Long Beach, CA

– **Coursework:** Advanced Artificial Intelligence, Distributed Computing, Computer Vision, Advanced Analysis of Algorithms

### National University of Computer and Emerging Sciences (FAST NUCES)

Jul 2023

Bachelor of Science in Computer Science

Lahore, Pakistan

– **Coursework:** Object Oriented Programming, Data Structures, Algorithms, Operating Systems, Linear Algebra, Probability and Statistics, Numerical Computing, Computer Networks, Databases, Software Design

## Technical Skills

**Languages:** Python, JavaScript, TypeScript, Java, C, C++, SQL, NoSQL

**AI/ML:** PyTorch, TensorFlow, scikit-learn, XGBoost, HuggingFace Transformers, LLM fine-tuning (LoRA/QLoRA), RAG pipelines, FAISS

**Backend & Systems:** Node.js, Django, FastAPI, microservices, REST, GraphQL, Redis, ElasticSearch

**Cloud & DevOps:** AWS, GCP, Docker, Kubernetes, CI/CD, Linux, OpenTelemetry

**Tools:** Git, GitHub Actions, Postman, Jupyter

## Experience

### Paismo HR

Dec 2024 – Jul 2025

Software Engineer

Lahore, Pakistan

- Built and deployed a scalable microservice using Node.js and MySQL for attendance policy management, reducing latency by 80% and improving reliability for 600+ enterprise users.
- Implemented machine to machine authentication using Auth0 and enhanced observability with OpenTelemetry across distributed systems.
- Developed a Retrieval Augmented Generation (RAG) pipeline for semantic resume job matching, improving employer retention by 20% and sales by 15%.

### xiQ, Inc.

Jul 2023 – Dec 2024

Associate Software Engineer

Lahore, Pakistan

- Optimized a high traffic product module end to end (React UI plus Django/SQL APIs) managing 100K+ contacts. Added pagination and caching to deliver 40% faster load times and reduce support tickets by 25%.
- Engineered a buyer analytics feature to track user behavior across B2B clients, improving conversion accuracy by 30% and lowering bounce rate by 20%.
- Collaborated with product, design, and data teams to ship backend APIs and responsive UI. Owned CI/CD, feature flags, and scalable rollouts under tight deadlines.

## Projects

### Brain CT Scan Reconstruction & Classification

Oct 2025 – Dec 2025

Python, PyTorch, GANs (cGAN), Transfer Learning, OpenCV

- Addressed limited CT scan availability by engineering a cGAN-based reconstruction model that generated high-fidelity synthetic slices, improving dataset diversity and model robustness.
- Built a transfer-learning classifier to detect diagnostic categories from reconstructed and real CT scans, increasing classification reliability under scarce medical data conditions.

### RoboInk - Automated 3D Card Printing System

Jun 2024 – Aug 2024

Django, AWS (S3, SQS, RDS), SVG, G-code

- Automated 3D card printing for an online retailer, reducing manual intervention by 90% and improving task reliability to 99%.
- Integrated AWS services for end-to-end pipeline management from checkout to 3D card print execution.

## Achievements

- **FAST NUCES** - Earned Dean's List honors five times for outstanding academic achievement in the top 5% of the cohort.
- **Winner, Paismo Hackathon 2025** - Engineered an AI based recruitment engine using retrieval augmented NLP.