Λ uhammad Hamza Shaikh

Education

University of Illinois at Chicago

Chicago, IL

Bachelor of Science in Computer Science

GPA 3.81/4.00

Technical Skills

Languages: Python, Java, JavaScript, TypeScript, SQL, Go, Scala, C/C++, HTML/CSS

Frameworks & Libraries: React.js, Next.js, Node.js, Express.js, Spring Boot, Tailwind CSS, JUnit, pandas

Tools & Technologies: AWS, VS Code, Git, MongoDB, Docker, PostgreSQL, Linux, Ansible, Jenkins

Certifications: AWS Certified Cloud Practitioner, CompTIA Security+

Experience

Navigate360

September 2025 – December 2025

Software Engineer Intern

Remote

Options Clearing Corporation(OCC)

May 2025 - August 2025

Software Security Engineer Intern

Chicago, IL

- Developed and maintained CI/CD pipelines using Ansible and Jenkins to provision and configure HashiCorp Vault clusters in AWS, enabling secure, automated secrets management for 200+ applications
- Automated privileged account provisioning, rotation, and recovery by building a Python program integrating with CyberArk REST APIs, eliminating 90% of manual account setup
- Created internal tooling in Go to automate HashiCorp Vault secret management, reducing manual configuration overhead and improving deployment speed

University of Illinois at Chicago

January 2024 – January 2025

Software Engineering Teaching Assistant

Palatine, IL

- Reinforced core software engineering principles by teaching Java Object-Oriented Programming, design patterns, threading, and JUnit testing to help students build maintainable and efficient software
- Developed strong communication and mentoring skills by guiding students through complex technical concepts and troubleshooting, which contributed to a 15% increase in average quiz scores
- Facilitated collaborative team projects for groups of 4-5 students, promoting best practices in software reuse, modular design, and agile development

Harper College

June 2024 - August 2024

Software Engineer Intern

Palatine, IL

- Migrated the IT Service Catalog from Excel to a SQL Server database, enhancing data integrity and enabling scalable management of 300+ IT systems used by 500+ employees
- Built a full-stack Next.js web portal with real-time updates and integrated REST APIs, streamlining service request processing and improving user experience
- Deployed the solution to production, cutting IT response times by 50% and efficiently managing 200+ monthly requests from internal teams

Projects

Campus Connect | Next.js, Node.js, React.js, TypeScript, MongoDB, Redis

July 2025

- Developed a student matching app with Next.js, TypeScript, MongoDB, and OAuth, onboarding 100+ users in the first
- Built a discovery algorithm with filtering, like/reject actions, and real-time match detection, eliminating duplicate profiles and speeding 100+ daily searches by 40% with Redis optimization
- Implemented real-time messaging with Socket.io and Redis caching, achieving sub-100 ms latency, 99.9% reliability, and persistent conversation storage

AI Finance Dashboard | Python, FastAPI, React.js, AWS, FAISS

August 2025

- Built a real-time financial analytics platform integrating Yahoo Finance API, FinBERT sentiment analysis, and scikit-learn models for stock trend prediction across major market tickers
- Developed a full-stack solution with React.js frontend and FastAPI backend, leveraging FAISS vector search for semantic news retrieval and MLflow for experiment tracking and model lifecycle management
- Implemented automated ETL pipelines on AWS using Lambda, processing 100+ daily news articles and delivering ML-powered market insights with sub-second query latency

Relevant Coursework

Data Structures and Algorithms, Cloud Computing, Secure Web Application Development, Object-Oriented Programming, Database Systems, Data Science, Machine Learning, Systems Programming, Networking