Furqan Khan

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EDUCATION

City College of New York – *Bachelor of Science in Computer Science*   Graduated May 2025
Relevant Courses: Artificial Intelligence, Machine Learning, Operating System, Data Structures/Algorithms, Object Oriented Programming

SKILLS

Programming: Python, Java, C, C#, C++, JavaScript, TypeScript, Golang, SQL
Frameworks: React, React Native, Nextjs, Django, Nodejs, Express
Software: AWS, Firebase, RestAPI, HTML, CSS, Git, AI/ML, Linux, Docker, Kubernetes

EXPERIENCE

AI/Cloud Engineer Intern – *Wabtec Corporation*   May 2024 – August 2024
- Integrated Amazon Bedrock into chatbot infrastructure, reducing content moderation risks for 20,000+ employees.
- Deployed 3 Kubernetes containers to refactor legacy apps, boosting scalability and deployment speed by 25%.
- Led 5+ stakeholder sessions with the OPS team to define GenAI use cases in ticket automation and natural language interaction.
- Proposed IBM Mono2Micro directly to Cloud Services senior leadership after 10+ research sessions, migrating 20+ enterprise apps from monolith to microservices.

Software Engineer Intern – *The Hipe Network*   Jan 2024 – April 2024
- Designed 6 detailed wireframes and prototypes using Figma, helping reduce MVP launch time by 2 weeks.
- Developed custom React components which reduced user clicks by 8%, enhancing page navigation efficiency.
- Implemented REST APIs using Node.js and Express, improving data retrieval efficiency by 25%.
- Optimized SQL database queries, reducing backend response times by 20% for core application endpoints.
- Integrated user authentication and authorization workflows, strengthening platform security and reliability.

PROJECTS

GenDecks | *Next.js 14, TypeScript, Tailwind CSS, NestJS, AWS, PostgreSQL, Google Gemini*
- Developed a flashcard application with AI-powered content generation using Google Gemini and Veo 3, increasing study efficiency by 42%.
- Implemented spaced repetition algorithm that adaptively schedules review sessions based on user performance metrics.
- Built serverless infrastructure with AWS Lambda, API Gateway, and Aurora PostgreSQL that scales automatically to handle peak learning periods.
- Designed intelligent content recommendation engine analyzing user data to personalize study materials, reducing study time by 28%.

Deennected | *React Native, Swift, Kotlin, Next.js, NestJS, PostgreSQL, AWS*
- Developed a cross-platform professional networking enabling users to connect and engage in real-time communication.
- Led mobile development using React Native and Expo, with native iOS (Swift/Xcode) and Android (Kotlin/Android Studio) integrations for biometric login, deep linking, and push notifications.
- Designed and deployed a secure backend with NestJS and PostgreSQL (AWS RDS), incorporating AWS Cognito for authentication and supporting over 2,000 authenticated sessions per week.
- Implemented real-time messaging via Socket.io and managed infrastructure using AWS Lambda, EC2, and CloudWatch to ensure performance, scalability, and monitoring.

Qafilah | *Django, Python, HTML, CSS, Stripe API*
- Developed and launched an exclusive online platform for perfume and cologne sales, utilizing Django and Python for robust backend functionality, and HTML for an intuitive user interface, attracting dozens of unique visitors within the first 15 days.
- Integrated Stripe API for seamless and secure payment transactions, contributing to 13% increase in sales conversions and successfully processing over 10 transactions per week.
- Designed and implemented an advanced product catalog system, handling over 100 distinct fragrance items, which enhanced user navigation and product discovery, leading to a 27% increase in customer engagement and repeat purchases.

EXTRACURRICULARS

Muslim Student Association (MSO) – *President*   December 2022 – May 2025
Association of Computing Machinery (ACM) – *Member*   September 2022 – May 2025