

Muhammad Alyan Khan

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EDUCATION

Georgia State University

Bachelor of Science in Computer Science

Atlanta, Georgia

Expected Graduation, December 2025

Honors: UH Dean's List (Fall 2021, Spring 2022), SJU Academic Achievement Scholar, Campus Atlanta Scholar, AWS Cloud Institute Full Learner Grant Recipient

Relevant Coursework: System-Level Programming, Software Engineering, Mobile App Development, Algorithms & Data Structures, Database Systems, Information Security, Mobile Computing

WORK EXPERIENCE

Software Engineering Intern – Zoku App

Mystery Activity Mobile Application Startup

Fall 2025

- Architected scalable AWS cloud infrastructure (EC2, RDS, S3, Lambda, CloudFront) reducing latency by 40%
- Led backend migration to AWS achieving 35% cost reduction while maintaining 99.9% uptime
- Collaborated with cross-functional team of 8+ developers using Agile methodologies; implemented AWS security best practices and comprehensive monitoring solutions

Software Development Intern – Vantage Marketing

Marketing Company

May 2023 - August 2023

- Developed full-stack analytics dashboards using React, Node.js, Python serving 500+ daily users
- Optimized legacy backend services improving API response time by 25% and reducing server costs by 15%
- Reduced production bugs by 30% through comprehensive testing (Jest, Selenium) achieving 95%+ coverage

Data Analytics and Machine Learning Intern – Vantage Marketing

Marketing Company

May 2022 - August 2022

- Developed ML models (Logistic Regression, Random Forest) achieving 78% churn prediction accuracy
- Engineered ETL pipelines processing 100,000+ daily records from CRM systems using Python and SQL
- Partnered with marketing teams translating ML insights into retention strategies, improving customer lifetime value by 20%

PROJECTS

Company 'Z' – Employee Management System | MySQL, Java, JavaFX, JDBC, UML, OOP |

- Developed interactive mobile applications with real-time data updates and secure user authentication.
- Designed normalized MySQL database with comprehensive ER diagrams and delivered complete SDD documentation

Microbe AI – Disease Outbreak & Misinformation Tracking | Python, Scikit-learn, Pandas, Reddit API, Power BI |

- Verified ML pipeline accuracy by testing model predictions vs. ground truth, achieving 72% reliability.
- Documented QA process and presented results via Power BI dashboards.

PSX – Blockchain Financial Platform | React, Next.js, Tailwind CSS, Flooz API, Web3 | [Live Site](#) | [GitHub](#)

- Developed comprehensive financial technology platform with real-time market data integration and secure transaction processing using AI-assisted development with Cursor IDE
- Implemented automated trading interface with dynamic pricing algorithms and enterprise-grade security protocols

JPMorgan Chase Software Engineering Virtual Experience | Java, Spring Boot, REST APIs, Git |

- Designed RESTful APIs and implemented JSON data workflows in simulated enterprise banking environment
- Gained hands-on experience with financial services development methodologies and enterprise-scale version control practices

SKILLS

Programming Languages:

Python, JavaScript/TypeScript, Java, C, C++, SQL, HTML/CSS, Bash

Cloud & DevOps:

AWS (EC2, RDS, S3, Lambda, IAM), Docker, Terraform, CI/CD, Git

Frameworks & Libraries:

React, Next.js, Node.js, Django, Spring Boot, Tailwind CSS, React Native, Flutter, JavaFX, Pandas, Scikit-learn

Enterprise Concepts:

System Design, Application Security, Agile/Scrum, Real-Time Dashboards, Distributed Systems, IoT Telemetry

Database & Analytics: MySQL, PostgreSQL, Power BI, ETL pipelines, Data Warehousing