Aayush Kumar

📞 (323) 363-9508 ✉ aayushkumar2004@gmail.com 💼 linkedin.com/in/aayushkumar2 🐙 github.com/akumar2408

Education

Arizona State University — **Dec 2026**
Master of Computer Science, Big Data Systems — *Online*
- Accelerated 3.5 + 1 concurrent program
- Graduate coursework: Mobile Computing, Data Visualization, Human Computer Interaction, AI Agents & Agentic AI

Arizona State University — **Dec 2025**
Bachelor of Computer Science — *Tempe, AZ*
- Dean's List — **GPA: 3.75**
- Courses: AI & Machine Learning, Operating Systems, Computer Networks, Cloud Computing, Data Structures & Algorithms, Database Systems

Work Experience

The Net VR — **Aug 2025 – Present**
Software Engineering Intern — *Remote*
- Shipped cross-platform **VR & mobile** features using **Unity (C#)** and **React Native**; validated in a closed beta with **100+** users and iterated from telemetry/feedback to harden UX and reliability.
- Built an **AI Companion** service (**Flask** REST APIs + **NoSQL**, WebSocket bridge) enabling real-time in-app assistance and adaptive behaviors, increasing session engagement and feature adoption.
- Dockerized backend into **microservices**, standardized local envs and CI checks, and optimized Unity frame timing (object pooling, async I/O), cutting integration time from **days** to **hours** and reducing latency by **15%**.

Endless Moments — **May 2025 – Present**
Software Engineering Intern (Capstone: Stock-Based Compensation System) — *Tempe, AZ*
- Architected a multi-tenant stock-based compensation platform (**Django/DRF**, **React**, **PostgreSQL**) with **409A** workflows, employer/employee portals, and PDF grant letters; sustained **p95 API** latency < **300 ms** for **100+** simulated users.
- Modeled normalized **PostgreSQL** schema (*company, employee, grant, vest_event*) and built an idempotent **ETL** path (app jobs → S3 → Glue → Redshift with **dbt**) using **MERGE/CDC**, achieving **freshness < 5 min** and **duplicate rate < 0.1%**.
- Hardened and productionized the system with **RBAC**, **JWT**+TOTP **2FA**, immutable **audit log**, **CSP/CSRF** protections, and **GitHub Actions** CI (~**75%** unit+integration coverage); containerized deployments on **AWS** (**RDS**, **S3**, **CloudFront**).

Projects

Operational Dashboard for Small Businesses | *Source Code* — **ReactJS | Spring Boot | PostgreSQL**
- Developed a full-stack dashboard (ReactJS, Spring Boot, PostgreSQL) to process sales data and generate 30-day forecasts, improving trend detection accuracy by **25%**.

AI InvestMate | *Source Code* — **NextJS | TypeScript | Supabase**
- Engineered a full-stack marketplace app (NextJS, TypeScript, Supabase) used by **50+ students** in beta to simulate investments, boosting engagement in financial literacy by **40%**.

Safety Guardian | *Source Code* — **AWS Kinesis | Glue | Redshift**
- Designed an ETL pipeline with CI/CD and **75% test coverage**, reliably processing **10K+ hazard events daily** in real time.

Certifications

IBM Machine Learning Specialization (IBM) | *Link* — **Jul 2024**

MLOps — Machine Learning Operations Specialization (Duke University) | *Link* — **Jul 2024**

AWS Fundamentals Specialization (AWS) | *Link* — **Jun 2024**

Technical Skills

Languages: Python, Java, TypeScript/JavaScript, SQL, Go, C#

Developer Tools: AWS, Postman, PowerBI, Git, Azure, Docker, Jira, Tableau

Libraries/Frameworks: FastAPI, Django/DRF, Spring Boot, React, Next.js, React Native, Node/Express, PostgreSQL