

Navigna Reddy Gangumalla

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EDUCATION

BS in Computer Science, Minor in Business

Expected May 2026

Arizona State University, Tempe, AZ ([Transcripts](#))

4.0 GPA

Coursework: Data Structures and Algorithms, Intro to Software Engineering, Information Assurance, Information Security, Intro Human Computer Interaction, Web Design and Development, Operating Systems, Foundation Data Visualisation, Data in R and Python, Entrepreneur Value Creation, Software QA and testing, Accounting and Finance Analysis

TECHNICAL SKILLS

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

Frameworks & Libraries: JavaFX, MERN (MongoDB, Express, React, Node), JUnit, Bouncy Castle

Web & App Development: React.js, Angular, Flutter, Swift, Kotlin, Dart, HTML5, CSS3, Tailwind CSS

Databases & Data Stores: PostgreSQL, MySQL, H2, MongoDB, DynamoDB, Pinecone, MAMP

Cloud & DevOps: AWS (Lambda, S3, EC2, RDS, DynamoDB), GCP, Docker, Jenkins, Azure, CI/CD pipeline

Tools & Platform: VS Code, GitHub, Eclipse, Android Studio, Oracle, Tableau, Power BI, Postman, Jira

CERTIFICATIONS

- **AWS Certified Solutions Architect - Associate** June 2025
- **AWS Certified Cloud Practitioner** May 2025

PROFESSIONAL EXPERIENCE

Arizona State University | Software Engineering Teaching Assistant

May 2025 - Present

- Delivered 10+ Canvas lectures, quizzes, and high-stakes exams for 100+ students, embedding JUnit and Jira demos to reinforce TDD and Agile workflows
- Managed Ed Discussion and direct support: curated 200+ threads with intelligent suggestions, handled 100+ student emails with tailored code reviews, and cut response times to under 4 hrs—boosting peer engagement by 30%
- Developed the ASU Help System in Java/JavaFX (Spring, H2 DB, Bouncy Castle) with first-user admin onboarding, multi-role access controls, one-time invite codes, and complete UML design artefacts

Dreamscape Learn | XR Experience Operator

Feb 2024 - Present

- Developed Unity3D VR simulations for STEM and humanities, driving 7,000+ weekly user sessions and capturing 10,000+ logs for Python-powered analytics and content optimisations
- Calibrated and maintained six haptic pod clusters (6–29 stations each), sustaining >99% hardware uptime and seamless VR performance
- Delivered technical demos and hands-on training to 50+ VIPs and student groups, translating complex XR concepts into engaging educational experiences

City of Phoenix | Software Development Engineer Intern

Jan 2025 - May 2025

- Developed a C# & SQL desktop asset-management app for 150+ staff with role-based Admin, Distributor, and Technician interfaces, slashing request turnaround by 40%
- Automated IT workflows and managed 200+ Windows NT devices—real-time lookup, usage history tracking, SVN-driven re-imaging—cutting hardware downtime by 35% and boosting efficiency by 30%
- Built an email-alert system for 500+ weekly asset requests, standardising workflows and accelerating cross-department communication by 40%

PROJECTS

Biking Paths Finder | FastAPI, GraphQL, Maps JavaScript API, Distance Matrix, OAuth 2.0

01/2025 - 05/2025

- **Developed** a full-stack web application with FastAPI, MongoDB and Google Maps Platform (Maps JavaScript API, Distance Matrix API), personalised cycling routes, cutting calculation time by 30% and boosting engagement by 50%
- **Implemented** OAuth 2.0 authentication (Google & Facebook) secured by JWT tokens, streamlining login flows and improving authentication efficiency by 40%

Scalable Content Delivery System | Java, Spring Boot, Redis, PostgreSQL, Docker, AWS (EC2, S3)

11/2024 - 02/2025

- **Engineered** a Docker-containerised, distributed microservices content delivery platform (Spring Boot backend, React frontend), integrating Redis caching to optimise response times and support high concurrent user loads
- **Implemented** a real-time monitoring dashboard to surface system performance metrics, rapidly identify bottlenecks, and drive performance tuning

Real-Time Study Group Platform | React, Node.js, Socket.io, PostgreSQL, Redis, WebRTC

04/2024 -10/2024

- **Built** a real-time collaborative study platform for 50+ concurrent users using WebSocket connections, integrating WebRTC video chat and a Canvas API whiteboard for instant messaging, live document sharing, and sub-100 ms latency sessions
- **Implemented** secure user authentication with Redis session management and built a responsive UI featuring Pomodoro timers, file uploads, and real-time presence indicators to streamline study workflows