

# Navigna Reddy Gangumalla

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## EDUCATION

### BS in Computer Science, Minor in Business

Expected Dec 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

**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

### City of Phoenix | Software Development Engineer Intern

01/2025 - 05/2025

- 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

- Built a full-stack web application enabling cyclists to find personalised routes using FastAPI and MongoDB, optimising path generation and reducing route calculation time by 30%.
- Integrated Google Maps Platform (Maps JavaScript API, Distance Matrix API) for real-time mapping and route visualisation, enhancing user engagement by 50%.
- Implemented OAuth 2.0 authentication with Google and Facebook login, securing user data with JWT tokens and improving login efficiency by 40%.

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

11/2024 - 02/2025

- Designed and implemented a Docker containerised, distributed microservices content delivery system (Spring Boot backend, React frontend) to handle concurrent user requests.
- Implemented Redis caching strategies to accelerate response times for frequently accessed content.
- Developed a monitoring dashboard to track system performance metrics and identify bottlenecks.

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

04/2024 -10/2024

- Engineered real-time collaborative platform supporting 50+ concurrent users with WebSocket connections, enabling instant messaging and live document sharing across study rooms
- Integrated WebRTC video chat functionality and collaborative whiteboard using Canvas API, facilitating seamless remote study sessions with sub-100ms latency
- Implemented user authentication system with Redis session management and developed responsive UI featuring Pomodoro timers, file uploads, and real-time user presence indicators