

Aditya Murarka

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EDUCATION

Arizona State University – Tempe, AZ	Aug 2024 - May 2026 (Expected)
Master's in Software Engineering, GPA - 3.59	
◦ Relevant Coursework: Data Structures & Algorithms, Semantic Web Engineering, Data Visualization, Cyber Security, Cloud Computing	
Manipal University Jaipur – Jaipur, India	Aug 2015 - May 2019
Bachelor's in Computer Science and Engineering	

TECHNOLOGIES & TOOLS

Languages: JavaScript, TypeScript, Python, Java, SQL, SPARQL
AI/ML: Model Context Protocol (MCP), Retrieval-Augmented Generation (RAG), PyTorch, NumPy, Pandas, Agentic AI
Frontend: Next.js, React.js, Redux, Tailwind CSS, Storybook, Chart.js
Backend: FastAPI, Flask, Spring Boot, Node.js, REST APIs, WebSockets
Tools & Infrastructures: Microsoft Azure, Kafka, GraphDB, Postman, JWT, Git, WSL
Testing & Analytics: Jest, React Testing Library, Adobe Analytics, Google Analytics

PROFESSIONAL EXPERIENCE

Software Developer III, Walmart Global Tech India – Bangalore, India	Mar 2022 – Jul 2024
◦ Engineered an Adobe Analytics dashboard to track supply chain activity, leading to the cleanup of idle resources and achieving a 15% decrease in cloud spending.	
◦ Migrated multiple high-impact AngularJS components to ReactJS, which boosted screen performance by 25-30%, and supported easier feature development.	
◦ Built an event-driven notification pipeline using a Kafka consumer in a Spring Boot backend, exposing REST APIs for user preferences and alert history, and pushing real-time notifications to a React frontend via WebSockets.	
◦ Implemented IAM-driven authorization using JWT token to enforce secure, feature-level authorization, enabling granular, scalable access management across the application.	
◦ Re-architected Excel-based workflows into backend-driven web platforms, improving data consistency, eliminating human errors, and adding auditable, traceable state transitions for supply-chain operations.	
◦ Achieved 92%+ test coverage using the Jest framework, significantly reducing production bugs and technical debt.	
Software Developer I, Nineleaps – Bangalore, India	Aug 2019 – Mar 2022
◦ Created interactive dashboards with Chart.js that enabled users to track KPIs in real time and cut manual reporting effort by providing the option to download and share these reports.	
◦ Engineered reusable multi-step form components with validations, improving the efficiency of the flow by 20% and improving overall user experience.	
◦ Introduced Storybook for component documentation, reducing onboarding time and cutting UI integration bugs.	
◦ Contributed to monorepo architecture, reducing code duplication by 30% and improving cross-project development efficiency.	
◦ Optimized code with code-splitting and lazy loading, improving page load times by 25% and boosting Lighthouse scores.	

SOFTWARE PROJECTS

F1 AI – Arizona State University, Tempe, AZ	May 2025 – Jul 2025
◦ Developed an AI-powered Formula 1 race engineer assistant using Next.js, FastAPI, and Tailwind CSS, featuring a natural language chatbot that leverages an MCP server to dynamically invoke backend tools for race schedules, standings, session results, and driver comparisons.	
Gotham Watch – Crime Analysis Platform – Arizona State University, Tempe, AZ	Oct 2024 – Dec 2024
◦ Built an interactive crime analysis platform using Python, React.js, and GraphDB, leading data preprocessing, backend architecture with Flask and SPARQL queries, dynamic visualizations, and deployment on Microsoft Azure for scalable real-time access.	

ACHIEVEMENTS

• Excellence award recipient at Walmart Global Tech India for outstanding performance in developing Omni Item Allocation features, performance optimizations, and implementing comprehensive analytics tracking	May 2023
• Spotlight award winner for outstanding project execution and team collaboration at Nineleaps	Mar 2021
• Hackathon champion "Million Dollar Idea" award for innovative business solution at Nineleaps	Jun 2019
• Multiple "Feather on the Hat" awards for consistent high performance and exemplary work quality at Nineleaps	