

Darshan Jigala Channa Reddy

darshanjigalachannareddy@gmail.com | Dayton, Ohio(Open to Relocate) | <https://www.linkedin.com/in/darshanrjceddy/> | <https://github.com/DarshanRedddy> | +1 937-313-9370

Summary: Software Developer with proven experience in full-stack web development, specializing in Python, Flask, Django, JavaScript, React.js, and scalable RESTful API design. Proficient in architecting and deploying secure, high-performance applications with clean backend logic, intuitive frontend interfaces, and role-based authentication systems. Skilled in working with both SQL and NoSQL databases including PostgreSQL and MongoDB, and deploying cloud-native solutions using AWS, Docker, and GitHub Actions. Experienced in building dynamic dashboards, real-time form handling, and seamless UI workflows, with exposure to third-party integrations. Strong foundation in Agile development, CI/CD pipelines, unit testing, and production-ready engineering in fast-paced, collaborative environments.

WORK EXPERIENCE

University of Dayton, Dayton, OH

Graduate Assistant

08/2024 - Present

- o Spearheaded the design and deployment of full-stack academic tools using Flask, JavaScript, and MySQL, automating performance tracking for 200+ students across 5+ courses, reducing manual grading effort by 60%, and building real-time dashboards with Chart.js accessed by 15+ faculty members weekly.
- o Deployed scalable RESTful APIs with JWT-based authentication, role-based access control, and 250ms average response time; maintained 90%+ pytest coverage, integrated GitHub Actions for CI/CD, and led Agile sprints for bi-weekly feature rollouts.
- o Configured backend logging, error monitoring, and usage analytics using Python's logging module and custom middleware, enabling 24/7 system uptime tracking, proactive debugging, and 99.5% availability during peak grading cycles.

Muscle Craft, Bengaluru, India

Web Developer, Freelance

01/2023 - 12/2023

- o Developed a full-featured client portal using React.js and Tailwind CSS, implementing 20+ reusable UI components, dynamic rendering, and WCAG-compliant accessibility, which increased session duration by 40% across 1000+ monthly users.
- o Integrated Razorpay APIs for encrypted payment workflows and Dialogflow chatbot for 24/7 client interaction, automating 80% of user queries, reducing manual effort by 35%, and improving customer satisfaction by 25%.
- o Optimized frontend performance with Webpack bundling, code splitting, and Lighthouse tuning to achieve under 1s TTI, maintained 99.9% uptime through Git-based CI/CD workflows and responsive mobile-first design.

Capgemini, Bengaluru, India

Software Developer Intern

03/2022 - 12/2022

- o Collaborated in the development of scalable backend services using Python, Django, and RDBMS, supporting data-driven features for 100,000+ active users and reducing API response time by 20% through optimized query handling and indexing.
- o Built and maintained modular front-end components using React.js and JavaScript, improving load performance by 25% and ensuring WCAG-compliant accessibility across enterprise-facing dashboards used by internal teams.

DEVELOPMENT PROJECTS

Smart Parking System – Real-Time Detection with YOLOv3 — Python, YOLOv3, OpenCV, Flask, JavaScript

01/2025 – Present

- o Developed a scalable computer vision solution using YOLOv3 and OpenCV, achieving 85%+ accuracy in classifying real-time parking slots via live feeds, secured with JWT auth and containerized using Docker.
- o Integrated asynchronous Flask APIs with dynamic front-end rendering, deployed via AWS EC2 with CI/CD, and followed modular MVC architecture and test-driven development (TDD) principles to ensure fault tolerance and maintainability.

Agri-Assist – AI-Powered Agricultural Recommendation System — Python, GPT-3.5, Stripe API, Weather API, Git

08/2024 – 12/2024

- o Created a secure, cloud-deployed agricultural assistant integrating GPT-3.5 and Weather API to deliver real-time crop and fertilizer insights, enhancing decision accuracy while reducing effort by 60%.
- o Integrated Stripe API for encrypted payment processing, built a cross-platform UI with responsive design and accessibility standards, implemented backend validation with error logging, and maintained version control using Git and Agile sprints.

BudgetMaster – Personal Finance Tracking System — React.js, Flask, SQLite, Chart.js, Tailwind CSS

01/2024 – 04/2024

- o Built a production-ready, responsive finance tracking platform using Flask and React.js, enabling secure logging of 10,000+ transactions/month across 300+ users with JWT-based authentication and role-based access control.
- o Deployed on AWS EC2 with CI/CD via GitHub Actions, applied component-driven frontend structure with Tailwind CSS, optimized database queries for 300ms latency, and implemented Agile workflows with Git versioning and peer-reviewed code.

EDUCATION

Master of Science in Computer Science

University Of Dayton, Dayton, OH

01/2024 - 12/2025 (Expected)

GPA: 3.82/4.0

SKILLS

Programming Languages: Python, Java, C, JavaScript, TypeScript

Frameworks & Libraries: React.js, Node.js, Express.js, Spring Boot, Django, Flask, Tailwind CSS, Chart.js

Database & Storage: MySQL, PostgreSQL, SQLite, MongoDB, Firebase, Oracle

Cloud & DevOps: AWS (EC2, S3), Microsoft Azure, Docker, Kubernetes, Git, GitHub, GitHub Actions, CI/CD

API Development: REST APIs, JWT, Stripe API, Google Maps API

Machine Learning & AI: GPT-3.5, YOLOv3, Computer Vision, OpenCV, NLP, Scikit-learn, Data Preprocessing, Feature Engineering

Visualization & Reporting: Power BI, Chart.js, Dashboard Development, Statistical Analysis