

Sowjanya Kothapalli

www.linkedin.com/in/sowjanya-kothapalli | +1 (617) 675-1140 | sowjanyakothapalli98@gmail.com

SUMMARY

Full Stack Software Developer with 2+ years of experience building high-performance web and backend applications using React, JavaScript, Python, Flask, and SQL. Proven success in delivering scalable APIs, optimizing data pipelines, and deploying cloud-native solutions with Docker, Kubernetes, AWS and Azure. Strong grasp of CI/CD automation using Jenkins, Git-based workflows, and Agile development methodologies.

EDUCATION

INDIANA UNIVERSITY, BLOOMINGTON Jan 2023 - Dec 2024
Masters of Science in Intelligent Systems Engineering, Major in Computer Engineering

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR Jul 2016 - Jun 2020
Bachelor of Technology in Electronics and Communication Engineering

SKILLS

Programming: JavaScript, Python, Java, SQL, HTML, CSS, React, Node.js, Express, Apex, Embedded C, Selenium
Frameworks: MongoDB, PostgreSQL, RESTful APIs, Flask, NoSQL, SQL, TensorFlow, PyTorch, Scikit-learn, Azure ML
DevOps & Cloud: Docker, Kubernetes, AWS (EKS, EC2, S3), Jenkins, Nginx

WORK EXPERIENCE

SOFTWARE ENGINEER, Heartland Community Network Feb 2025 – Present
Bloomington, IN

- Drove a 25% increase in lead generation for a real estate website serving 10,000+ monthly users by architecting a secure backend using Node.js, Express, and MongoDB.
- Accelerated development velocity by 40% through building 15+ reusable React.js components for filtering, content display, and FAQs, enabling non-technical teams to deploy features independently.
- Improved listing accuracy by 95% via real-time API integrations for property pricing and location data, resulting in 30% higher user engagement and 15% increase in qualified inquiries.
- Deployed Dockerized microservices on AWS EKS using Kubernetes with Nginx ingress and CI/CD pipelines using Jenkins to ensure seamless, zero-downtime releases.

DATA ENGINEERING INTERN, Boozevilla June 2024 – August 2024
Washington, DC

- Reduced operational costs by \$150K annually by automating competitor pricing analysis using Python/Selenium web scraping, eliminating 80% of manual data collection across 500+ products.
- Enhanced user experience for 5K+ customers by building Flask API that reduced data load times by 50%, increasing conversion rate by 12% and page retention by 25%.
- Improved API reliability to 99.5% uptime through comprehensive testing infrastructure with Flask utilities and unit tests, preventing 10+ potential production outages
- Managed iOS beta testing via TestFlight, gathering user feedback and reproducing mobile-specific bugs.

SOFTWARE ENGINEER, Capgemini Oct 2020 – August 2022
Hyderabad, India

- Delivered \$2M cost savings for Fortune 500 client by implementing full-stack Contractor Scheduling App (Apex/Lightning Web Components), reducing manual scheduling overhead by 60% for 10,000+ contractors
- Led high-performing team of 5 engineers to achieve 90% reduction in production errors, improving system stability from 94% to 99.8% uptime across 3 major releases.
- Achieved enterprise-grade quality standards with 87% code coverage through Apex unit testing and streamlined CI/CD pipeline (Jenkins/SFDX), reducing deployment time by 70%
- Developed and maintained custom Lightning components using Aura and LWC to enhance UI consistency and performance.
- Worked on API integrations of Salesforce with Mulesoft backend Systems to eliminate manual processing of customer data.

PROJECTS

HEALTHCARE Q&A BOT

- Implemented three different Natural Language Processing methods to answer medical questions without external information, using the MedQuAD dataset.
- Enhanced medical question answering accuracy using Semantic Search and T5 models, achieving 70.42% top accuracy and a BLEU score of 14.3, respectively, for precise and effective results.
- Streamlined the training of the T5 model by reducing its parameters using LORA and QLORA techniques, enhancing efficiency without sacrificing answer accuracy for medical questions.