

VASAVI DODDAMANI

<https://www.linkedin.com/in/vasavi-doddamani> | +1 669-264-6505 | vasavidoddamani@gmail.com

EDUCATION

- **University of California , Santa Cruz - Master's in Computer Science** *Aug 24 – Dec 25 | Santa Cruz, CA*
Course Work: Artificial Intelligence, Analysis of Algorithms, Computer Architecture, Distributed Systems

WORK EXPERIENCE

Software Development Engineer Intern | Amazon

June 2025 – Sept 2025 | Seattle, USA

- Implemented the refill consolidation feature in Amazon Pharmacy, used in 20% of pharmacy orders, enabling customers to combine prescriptions and receive personalized offers, resulting in cost savings of \$0.10 per unit.
- Developed a Policy Engine to enforce state and federal regulations on pharmacy orders, ensuring 100% compliance during refill consolidation and reducing order validation latency by 15%.

Senior Software Engineer | Eastern Software Systems

Oct 2022 – June 2024 | Bengaluru, India

Client: Tokio Marine HCC, Standard Chartered Bank

- Implemented Azure Functions to enforce uniform tagging rules across 10,000+ Azure resources, fetching tagging data using GraphQL APIs.
- Designed and automated an IP distribution system using Terraform and AWS IPAM Pool, provisioning IP blocks and CIDRs across thousands of virtual networks on AWS and Azure.
- Developed standardized and custom API-driven configurations for F5 network devices, creating an intuitive HTML/CSS/JavaScript UI that enhanced user interaction by 40%.
- Engineered and automated commissioning and decommissioning workflows for 1,000+ network devices, integrating monitoring tools like Sevone and Netbrain using AppViewX and REST APIs.

Software Engineer | Thomson Reuters

May 2021 – Oct 2022 | Bengaluru, India

- Developed REST APIs and AWS Lambda functions to normalize legal PDFs, cutting processing time by 30%.
- Built extensive test suites (unit, integration, pre/post-hooks) using Pytest for API validation.
- Refactored AWS Lambda environment variables to overcome storage limits and improve configuration flexibility.

TECHNICAL SKILLS

- **Programming Languages(s):** Python, Java, C, C++, SQL, linux
- **Frameworks & Technologies:** REST API, GraphQL, Flask, Pandas, Numpy, Pytest, Unit Test, HTML, CSS, JavaScript, TypeScript, CDK, JUnit, Express.js, Node.js
- **Cloud Technologies:** AWS (API Gateway, Step Function, Cloud Watch, DynamoDB, Lambda, EKS, ECS), Azure, Kubernetes, Microservices, Distributed Systems, Multi-Threading, Operating Systems, Kafka, Jenkins, CI/CD
- **Database:** PostgreSQL, MySQL, NoSQL, Redis
- **Tools & Practices:** Git, Docker, Object Oriented Programming, Shell Scripting, Linux, Agile, Scrum, Django, SDLC, SQLAlchemy, Unit Testing, Test-Driven Development, Data Structures, Algorithms, Design Patterns, Debugging

PROJECT WORK

AI-powered code optimization with profiling feedback

- Built an AI agent using Linux perf to detect and fix performance bottlenecks in C++ code by iteratively generating, testing, and selecting optimized variants.

Technologies: Python, perf, AI Agent, Gen AI, C++, linux, Open AI APIs

Network simulator bridge using ns-3 simulator

- Developed a lightweight pipeline with a message server and client libraries to bridge distributed applications with network simulators like OMNeT++ and NS-3.

Technologies: C++, OMNeT++, NS-3

Cache Miss Analysis and Branch Prediction in Scarab Simulator

- Implemented a multi-threaded 3C cache miss analysis and a two-level branch predictor, reducing execution stalls and improving performance in multi-core simulations.

Technologies: C, C++, Multi-threading, System Performance Optimization, Discrete Event Simulation, Multi-core Systems, Multi-threaded Programming, Performance Optimization, Debugging

Ingestion of Social Media data into Data-Lake

- Contributed to a 'Data Ingestion into Data Lake' project, using Python to scrape and store unstructured data in Hadoop with Spark. Assisted in managing large social media datasets to improve data cleaning and processing.

Technologies: Spark, Hadoop, and MapReduce.

CERTIFICATIONS & AWARDS

- Gold Medalist in Engineering College. (2nd Rank).
- Received the BPS Star Performer award and GEMS in TCS.