

Education

Santa Clara University

Master of Science in Computer Science & Engineering

Sep. 2023 – June 2025

Santa Clara, CA

Vishwakarma Institute of Technology

Bachelor of Technology in Computer Engineering

Aug. 2019 – May 2023

Pune, MH

Relevant Coursework

- Data Structures
- Machine Learning
- Compiler Design
- Operating Systems
- Artificial Intelligence
- Data Science
- Database Management
- Software Engineering
- System Software
- Web Technologies
- Computer Networks
- Algorithms

Professional Experience

Johnson Controls International

Site Reliability Engineer Intern

Aug. 2022 – June 2023

Pune, MH

- Engineered a streamlined system to automate VPN access provisioning for the entire engineering organization, and seamlessly integrated it with Jira.
- Eliminated the need for manual intervention by designing a fully automated solution that handled both VPN provisioning and access removal, in addition to providing real-time status updates through email notifications using SendGrid API.
- Demonstrated efficiency as the system successfully processed thousands of VPN access requests each month, while also swiftly addressing and resolving over 5,000 Jira tickets within a short timeframe.
- Recognized for contributions to the project during the SRE all-hands meeting, highlighting the impact and effectiveness of the automated system in improving workflow and productivity.
- Contributed to a team effort in implementing MLOps practices to train a machine learning model on thousands of hourly-generated infrastructure health tickets, facilitating automated self-healing based on categorized recurring issues.
- Automated SAAS token renewal and updates within Azure App Service across 10+ regions and environments. The system executed updates in live, operational environments and incorporated comprehensive error-handling mechanisms.
- Led Knowledge Transfer sessions for new engineers on managing and enhancing systems I developed, ensuring a smooth transition and continued operational excellence.

Projects

iOS App, Brooklyn GRE & SAT Preparation | *Swift, Python, SwiftUI, UIKit, Go, AWS, DynamoDB*

April 2022

Link - <https://apps.apple.com/in/app/brooklyn-gre-sat-preparation/id1620017367>

- Built an iOS application for standardized test preparation, harnessing Swift and Golang. The backend was engineered using Golang Gin, containerized through AWS Fargate, and directed through an AWS Load Balancer over HTTPS.
- Employed a blend of SwiftUI and UIKit to create the user interface for the mobile application. Utilized Swift.SQLite for persistent data storage and integrated MixPanel for comprehensive analytics.

iOS App, Thaleia Music Updates | *Swift, Python, SwiftUI, Spotify-API, AWS SNS, MySQL*

Aug. 2021

Link - <https://apps.apple.com/in/app/thaleia/id1581369776>

- Created a music-tracking iOS application with an event-driven microservices architecture, utilizing Python automation and the Spotify API to deliver real-time music updates.
- Orchestrated automated scheduling via AWS CloudWatch and remote notifications through AWS Pinpoint.

Deep Learning Agent, TD-Gammon | *Python, PyTorch, NumPy, Deep Learning, RL*

Mar. 2021

Link - <https://github.com/OneUpWallStreet/TD-Gammon>

- Reimplemented TD Gammon (G. Tesauro, 1995) using PyTorch, enabling a self-play reinforcement learning agent to achieve superhuman performance in Backgammon.
- Constructed the Backgammon engine from the ground up using Python, meticulously training the agent through an extensive dataset of over 300,000 self-play games.
- Designed intuitive win probability graphs and a user-friendly "move probability" interface using Matplotlib.

Publications

- Cloud Computing Services for Mobile Applications (Swarom Muley, Dr. S.T. Patil)

Technical Skills

Languages: Swift, Python, Golang, C++, C, Java, JavaScript, Typescript, Ruby, SQL, HTML/CSS, Node.js, C#, Bash
Frameworks/Tools: AWS, Shell, VMware, Linux, Docker, Azure, Jenkins, Kubernetes, GCP, CI/CD, Terraform
Misc.: MySQL, React JS, NoSQL, AWS S3, Cassandra, EKS, AKS, Redis, REST-API, Ansible, MS SQL, Kafka, Git