

## Education

### Santa Clara University

09/2023 – 03/2025

Master of Science in Computer Science &amp; Engineering (GPA - 3.8)

Santa Clara, CA

### Vishwakarma Institute of Technology

08/2019 – 05/2023

Bachelor of Technology in Computer Engineering (GPA - 8.9)

Pune, MH

## Professional Experience

### NVIDIA

04/07/2025 – Present

Site Reliability Engineer

Santa Clara, CA

### NVIDIA

06/17/2024 – 09/20/2024

Site Reliability Engineer Intern

Santa Clara, CA

- Architected MLOps solutions for NVIDIA NIM's distributed LLM infrastructure, implementing platform engineering across K8s clusters in a multi-cloud environment on OCI and AWS.
- Designed, developed, and maintained a reusable set of CI/CD pipeline components, reducing CI code size by up to 97% (equivalent to a 60x reduction in some scenarios), significantly optimizing efficiency across the dev organization.
- Rolled out and managed a PR-Agent in K8s, automating code reviews for every merge request (MR) while bolstering observability through comprehensive logging and tracing with DataDog and OTel.
- Automated synchronization of Distribution Lists (DLs) and Slack User Groups via Microsoft Graph API and Slack API, using K8s cron jobs, enhancing on-call coverage.

### Johnson Controls International

08/23/2022 – 06/30/2023

Site Reliability Engineer Intern

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.
- 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

### IoT System, Smart Fridge | C, Python, OpenCV, AWS, Raspberry Pi, ARM, IoT, Swift, SwiftUI

02/2024

Link - <https://github.com/OneUpWallStreet/IoT-System-Smart-Fridge>

- Collaborated on engineering a Smart Fridge IoT system with Raspberry Pi and OpenCV for image analysis.
- Drove AWS integration for data analysis, aiming for precision in food item detection.
- Crafted a complementary iOS app with Swift-SwiftUI for mobile access to fridge inventory, notifications, and analytics.
- Implemented a predictive notification system alerting users to critical inventory changes and upcoming expirations.

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

04/2022

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

- Built an educational platform using Swift and Go, with backend deployment on AWS Fargate for secure, scalable access.

### iOS App, Thaleia Music Updates | Swift, Python, SwiftUI, Spotify-API, AWS SNS, MongoDB

08/2021

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.

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

03/2021

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.

## Technical Skills

**Languages:** Python, Swift, Go, C++, C, Java, JavaScript, Typescript, SQL, HTML/CSS, Bash, PowerShell**Frameworks/Tools:** AWS, Linux, Docker, Azure, Helm, Jenkins, Kubernetes, GCP, CI/CD, Terraform, Ansible**Misc:** MySQL, NoSQL, S3, ArgoCD, Flux, REST-API, Kustomize, OpenTelemetry, GitHub, DataDog, IoT, DevOps