MAITRA PATEL
Software Engineer

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GITHUB
https://github.com/MaiTra10

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EXPERIENCE

SDE Intern @ Amazon (AWS Cloud Map)
On-Site | Vancouver, BC
12 Weeks | May 2025 - August 2025

- Designed and implemented a **Java-based Lambda function** to automate cleanup of crucial **EC2 metadata** located in a **DynamoDB table** as part of the **Cloud Map Cross-account** project
- Proposed the adoption of **Go** for the Lambda function to senior engineers and the project lead, citing performance benefits
- Developed a **proof-of-concept Go Implementation** demonstrating **~3s faster cold starts** and **50% faster duration** on a **quarter of the memory configuration** (**128 MB** for Go vs. **512 MB** for Java)
- Worked closely with the team to **roll out the Cross-account** feature to the customer
- Deployed the Lambda function across **34 AWS regions** maintaining metadata integrity of up to **300 EC2 instances**

DevOps Engineering Intern @ General Dynamics
Hybrid | Calgary, AB
12 Months | Jan 2024 — Dec 2024

- Developed custom **Powershell scripts** for **Ansible** to **automate** server deployment processes, significantly reducing manual effort
- Wrote and maintained **Ansible playbooks** within a vast **GitLab** codebase, integrated with **CI/CD pipelines** to streamline processes
- Conducted thorough **reviews of build books and documentation**, resolving errors and inconsistencies
- **Collaborated with other teams** to address issues with build books to ensure system reliability and standardization
- Actively participated in **Agile Scrum** ceremonies, **driving sprint planning** and contributing to strategic decisions for future work

SumoBot Team Member, Alberta Collegiate Robotics
Calgary, AB
16 Months | Jan 2022 — May 2023

- Programmed an onboard **Arduino** to autonomously control movement, detect arena edges, and operate a lifting ramp
- Designed the robot chassis using **3D CAD** software, including both **Fusion 360** and **OnShape**, to create precise and robust models

TECHNICAL SKILLS

Languages: Go, Python, Java, TypeScript, JavaScript, HTML, CSS, SQL, Bash, YAML, XML
Frameworks and Tools: AWS, Terraform, Docker, Git, Github, GitLab Pipelines, Django, Ansible, Artifactory
Storage Solutions: PostgreSQL, MySQL, DynamoDB, S3 Bucket, RDS
Knowledge: Distributed Systems, Unix/Linux Environments, Cloud-native architecture, Infrastructure as Code, CI/CD Pipelines

PROJECTS

prjctVes | Personal Project | https://github.com/MaiTra10/prjctVes
An integration of CS:GO item and stock price data querying in Discord

- Deployed a **Python REST API** on **AWS API Gateway**, integrating **Lambda functions** and **DynamoDB** to manage user watchlists
- Hosted the application on a **Raspberry Pi 4**, running a **Linux/arm64 Docker image** with a **Debian-based OS**
- Leveraged **Yahoo Finance** and **Steam APIs** to retrieve stock and CS:GO item data, while using **BeautifulSoup4** for web scraping and **matplotlib** for data visualization
- Optimized price-checking operations, reducing personal cellular data usage by **93%**.

CarLens | Group Project *(Backend and Deployment Team)* | https://github.com/MaiTra10/CarLens
An AI powered vehicle appraisal website

- Implemented industry standard security measures in **Go** via **JWT** and **argon2 password hashing** for log-in and registration
- Utilized **Jina AI** to scrape vehicle data from Kijiji or AutoTrader as well as **Deepseek** to generate price estimate and vehicle rating
- Hosted the **Go** backend server and a **Next.JS** frontend on an **AWS EC2 t2.small** instance within a **VPC**

TapeDeck | Personal Project | Work in Progress
A community oriented video sharing platform

- Refactored **AWS Lambda functions** from **Python** to **Go** reducing cold start latency by **~1 second** and runtime by **~60%**
- Provisioned entire **AWS infrastructure** (**IAM roles**, **policies**, **API Gateway**, **Lambda**, and **more**) using **Terraform**, enabling reproducible deployments
- Optimized **Supabase** query times resulting in a **latency reduction** of **~75%** through strategic region selection

EDUCATION

Bachelor of Science in Software Engineering, University of Calgary
Calgary, AB
Sep 2021 — Dec 2026

PROFESSIONAL DEVELOPMENT

Engineering Leadership Program
University of Calgary
Sep 2022 — May 2024