

# Akshit Rameshkumar Desai

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## EDUCATION

**Concordia University, Montreal** - M.Sc. in Applied Computer Science (GPA: 3.88/4.3) 09/2022 - 04/2024  
**Gujarat Technological University** - B.E. Computer Engineering (GPA: 9.38/10.0) 08/2017 - 05/2021

## TECHNICAL SKILLS

**Languages** : C, C++, Java, Golang, Python, JavaScript  
**Databases** : MySQL, PostgreSQL, MongoDB, Redis, DynamoDB, YugabyteDB  
**DevOps** : Docker, Kubernetes, Kubeflow, Harness, Spinnaker, AWS, GCP  
**Other Tools** : Kafka, RabbitMQ, Git, Postman, Selenium, key-cloak

## EXPERIENCE

**Amazon** Vancouver, Canada  
**SDE I** 05/2024 - Present

- Getting started

**SDE Intern** 05/2023 - 08-2023

- Implemented data pipeline to dump data into S3 Bucket using automated cradle jobs and it's job-profiles. Injected data to DynamoDB using AWS CDK(Typescript) to create automated resources(GlueJobs, DynamoDB etc).
- Created new API views using Datapath (Amazon's Declarative Language) and service APIs using Scala(Coral framework), enabling approximately 15 teams at Amazon to seamlessly integrate with the service.
- Improved observability by adding alarms using internal framework(Ruby) and metrics for new & existing APIs.

**Instaview.ai** Remote, Canada  
**Software Engineer II** 08/2023 - 05/2024

- Developed backend services with more than 50 APIs from scratch with domain-driven architecture in Go.
- Designed complex workflows connecting IoT devices with the system and integrated AWS IoT components such as things, things shadow, certificates, life-cycle events and other communications through MQTT.
- Engineered a comprehensive wrapper library for internal use, simplifying AMQP for RabbitMQ, AWS, Backblaze, MQTT, middlewares, validators, and push notification clients(i.e., APNS, FCM, and Pushy) across microservices.

**Kamivision** Remote, Canada  
**Software Engineer** 04/2022 - 05/2023

- Developed and fixed different APIs for core back-end services in Go.
- Programmed CLI tool for AI team to get videos from kinesis video streams for analyzing and training AI models, automating manual efforts of 2 days, and optimized further with go routines.
- Helped AI team to set up kubeflow with Custom RBAC on kubernetes on the local server.
- Revamped Unit-testing and CI pipeline in major back-end services. Educated team with Unit-testing & integration testing, reducing a number of production failures and bugs by 50%.

**Zopsmart** Bengaluru, India  
**SDE I** 06/2021 - 04/2022

- Architected and optimized Golang-based ETL pipelines for **Kroger Co, US**, and its subsidiaries, achieving seamless migration, synchronization, and merging of user data; handling daily traffic of 9 million users using kafka and ensuring uninterrupted data flow.
- Introduced & engineered distributed locking mechanism, Data fix Scripts, DB-retry features, resolving data discrepancy errors; Automated Bulk data migration using shell scripts, reducing 8 hours of manual efforts.
- Maintained and set up deployment pipelines on harness from scratch; Enhanced monitoring process by adding Grafana and Dynatrace tools for data visualization.

**SDE Intern** 02/2021 - 06-2021

- Delivered end-to-end functionalities for internal project.

## PROJECTS

**Online graph coloring** | Javascript, React.js, C++ | 🎧 🎧 🎧

- Online graph coloring visualizer, solved by CBIP and first fit Algorithm.

**Kubeflow-GNN** | Python(PyTorch), Kubeflow, GCP | 🎧 🎧

- Trained SAGEConv for predicting link properties in document citation networks. Orchestrated GNN model training as a PyTorchJob within Kubeflow, leveraging Pytorch DDP for distributed training and reduced training time by 40%.

**ChuckMate** | Python(Django) | 🎧 🎧

- A Web app with roughly 100 monthly active users, feeding new jokes on every click.

## ACHIEVEMENTS

- **ACM ICPC - Honourable Mention** : Secured 477th (top 10%) rank in the online round and 79th in the Kanpur region round of ICPC Asia Kanpur Regionals. 🎧