

# Rahul Rangith

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## Skills

- **Languages/Frameworks:** Go, Ruby, Rails, C, C++, Python, Java
- **Technologies/Tools:** Docker, Kubernetes, MySQL, Git, Datadog, Splunk, AWS, GCP

## Experience

### Shopify — Production Engineer Intern

May 2020 – April 2021

- Responded to multiple incidents as member of 24-hour Database Connection Management on-call rotation
- Led project to dynamically manage ProxySQL query rules for easier incident response, read more [here](#)
- Mitigated client errors caused by ProxySQL deploys by over 50% and reduced deploy times by over 1 hour
- Developed solution to specify image versions when deploying ProxySQL with a Kubernetes custom resource controller, leading to safer rollouts of new versions and the ability to prototype
- Created prototype MySQL Admission Control plugin to protect databases from overload, along with guaranteeing capacity for high priority queries using C++, and Sysbench for benchmarking
- Implemented core features for Shopify's custom Horizontal Pod Autoscaler using Go and Kubernetes

### Shopify — Backend Developer Intern

September – December 2019

- Developed core features and optimizations for Billing Service using Ruby on Rails
- Implemented idempotency in GraphQL mutations to prevent charges from occurring multiple times along with adding Datadog metrics and Splunk logging to improve observability
- Applied load shedding solution to reduce overload risks by delaying jobs if Billing Service had too much load
- Refactored code to facilitate sharding by restructuring queries, leading to performance improvements including reducing one daily job's running time from 9 hours to 15 minutes

### TextNow — Software Developer Intern

January – April 2019

- Created scalable microservice to initiate and monitor port requests along with designing a service layer to communicate and handle callbacks from third party APIs using Ruby on Rails
- Implemented job queuing using Sidekiq and Redis to increase port request completion rates
- Automated deployment process of porting service to AWS Elastic Kubernetes Service using Docker, Jenkins, and Kubernetes to allow scalability and effortless updates without downtime
- Utilized Terraform to build and version control AWS infrastructure such as RDS and ElastiCache

### Symantec — QA Automation Engineer Intern

May – August 2018

- Developed application to generate reports for Norton Secure VPN reviews from the App and Play Stores
- Trained machine learning model to perform Multi-Label Text Classification on reviews using Python, Natural Language Processing, and sci-kit learn to achieve 85% accuracy

## Projects

### StoryTime | <https://github.com/rrangith/StoryTime>

- Finalist at Hack the Valley 2019 with web app that takes user speech and generates images
- Automated deployment to Google Kubernetes Engine using TravisCI

### RealTalk | <https://github.com/rrangith/RealTalk>

- Won 1<sup>st</sup> at DeltaHacks 2019 with web app that gives users real-time feedback on presentations
- Developed multi-threaded Flask API to analyze and track facial expressions and hand gestures using OpenCV

## Education

- University of Waterloo, 4A Computer Engineering

September 2017 – April 2022