**Skills**

* **Languages/Frameworks:** Go, Ruby, Rails, C, C++, Python, Flask, Java, JavaScript, GraphQL
* **Technologies/Tools:** Docker, Kubernetes, MySQL, Git, DataDog, AWS, GCP

**Experience**

**Shopify — Production Engineer Intern Summer 2020**

* Performed key operational and development work on the Capacity and Database Platform teams
* Developed 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, such as preventing underscaling as well as simplifying the app onboarding process using Go and Kubernetes

**Shopify — Backend Developer Intern Fall 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 withadding 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, leading to a 100% increase in the service’s bandwidth
* 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 Winter 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 Summer 2018**

* Developed application to aggregate and generate daily reports for Norton WiFi Privacy reviews from the App Store and Play Store using Python, Slack API, and Jenkins
* 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**](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 to push Docker images along with creating and updating Kubernetes resources on updates to master branch
* Developed Flask API to perform text to image conversion using Bing’s Image Search API

**RealTalk |** [**https://github.com/rrangith/RealTalk**](https://github.com/rrangith/RealTalk)

* Won 1st 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 and pretrained machine learning models

**Education**

* University of Waterloo, 3B Computer Engineering **September 2017-April 2022**