

Experience

BlackBerry | Software Engineer Intern

C, C++, Python, gRPC, Docker | Jan 2020 - April 2020

- Developed internal verification tools to trigger eBPF sensors on Cylance Optics
- Extended sensor suite with new sensors using auditd, audisp and Netlink to improve consistency of live supervision
- Created Docker containers to dynamically run internal tools through supervisord, sending messages to parsing clients using gRPC and protocol buffers

OpsLevel | Software Developer Intern

Ruby on Rails, Vue.js, Vuex, Redis, MySQL | May 2019 - August 2019

- Developed a BitBucket integration to handle API requests and webhooks for thousands of customer repositories
- Cached async workers in Redis using Sidekiq unique jobs reducing API calls by 50%
- Visualized AWS infrastructure costs with Vue.js to create compelling demo features

Projects

Safekeep | Airbnb for storage

Flask, PostgreSQL, React Native, Redis, AWS

- Created a mobile app that lets users rent out their free space similar to Airbnb
- Utilized Redis to manage real-time geospatial indexes at scale and speed, deployed on AWS ElastiCache
- Integrated Stripe for user onboarding, verification, and payment management with a streamlined order checkout process
- Implemented tagging system for extensive searching through thousands of listings
- Utilized AWS Cloudfront CDN for fast cached loading on profile and listing images

AutoDeck | Top 30 @ PennApps XX Hackathon

React, Node.js, Express, GCP | github.com/cynicalpillow/autodeck

- Created a web app that generates Google Slides presentations as the user speaks
- Leveraged GCP NLP API to produce entity salience and sentence sentiment analysis
- Created a Google Slides API client with Express.js to edit slide elements in real time

Rarestupper | Live leaderboard web application

Django, Tensorflow, Redis, JavaScript | github.com/cynicalpillow/rarestupper

- Developed a web application that displays a live leaderboard of the dog species with data from the subreddit /r/rarepuppies
- Trained and deployed a deep neural net model for classifying dog species using Tensorflow

Skills

Languages

- Python
- SQL
- Ruby
- JavaScript
- C / C++
- Java

Tools / Frameworks

- Flask
- Linux
- PostgreSQL
- Docker
- Express
- Redis
- React
- gRPC

Awards

PennApps XX Hackathon

- Top 30 out of 200+ teams (2019)

Canadian Computing Contest (Senior)

- 49th out of 2000+ competitors (2018)

ECOO-CS Competition

- Finalist Award (Top 15) (2017)

Education

University of Waterloo

Sept 2018 - Exp. May 2023

Candidate for an Honours Bachelor of Computer Science degree (Co-op)

Relevant Courses

- CS246 - Object Oriented Software Development
- CS240 - Data Structures
- CS251 - Computer Organization and Design
- CS241 - Foundations of Sequential Programs