NAKUL PATHAK

SKILLS

- Languages: Python, C++, Scala, Javascript, Java, Ruby, SQL, Bash
- Frameworks: Ruby on Rails, Flask, Django, React
- Tools: *nix, Vagrant, Jenkins, Docker, Kafka, Zookeeper, Kubernetes

Work

• SigOpt, Software Engineering Co-op

September 2018 - Current

- Created API and web interface to use Zookeeper as a feature flag management and resource throttling system
- Developing tool for managing training clusters and hyperparameter tuning using Docker, Kubernetes and AWS
- Twitter, Software Engineering Co-op

January 2018 - April 2018

- Designed and implemented microservice on a senior backend team that modularized existing Twitter ads reducing time required to create new ad formats from 6-8 weeks to 7 days
- Prepared microservice for production through CI jobs, monitoring dashboards, integration tests, and load tests
- Taught classes about Bash and led #MindfulnessMonday meditation sessions across the company
- Apple, Build and Integration Co-op

May 2017 - August 2017

- Led investigation of multiple Jenkins job management systems to find ideal implementation for Apple builds
- Automated creation and modification of over 500 Jenkins jobs based on investigation results
- Presented decision making process and final implementation of project to over 20 engineers across 4 teams
- Shopify, Software Developer Co-op

September 2016 - December 2016

- Set up authentication flows following OAuth2 and Open ID Connect specifications for Single Sign On project
- Reduced image load times on shopify.com by $\bf 10\%$ using CDN tools
- Migrated models from storing data in YAML files to SQLite database decreasing query execution time
- Oracle Eloqua, Developer Operations Co-op

January 2016 - April 2016

- Decreased Teamcity agents' set up time by 63% using Chef, Bash scripts and Rake tasks
- Reduced quarterly maintenance time from 2 hours to 5 minutes by automating virtual machine management
- Set up internal gem server by creating a Docker container deployed using Apache Mesos
- Shopify, Software Developer Co-op

May 2015 - August 2015

- Added over 100 third party payment system integrations by automating addition of these systems to Shopify
- Improved accuracy of financial GMV calculations by 5% by filtering duplicate payment system responses
- Created and integrated open-source Payment Icons gem across Shopify's codebase

PROJECTS

• Undergraduate Research

September 2017 - December 2017

- Implemented openCypher queries for in-memory graph database under Dr. Semih Salihoglu

• Personal Blog Gem | 🖸 | 🗹

March 2016

- Ruby gem that adds a responsive and customizable personal blog with markdown support and syntax highlighting to Rails applications
- Downloaded over 2700 times since March 17, 2016

EDUCATION

• University of Waterloo, Bachelor of Software Engineering

September 2014 - April 2019

- Founder and president of Meditation Explorers club - organized and lead weekly meditation sessions