

Aman Dureja

adureja@edu.uwaterloo.ca | github.com/aman-dureja | linkedin.com/in/amandureja | amandureja.com

Skills

Languages: Python / Go / C++ / Java / Ruby / JavaScript / Bash / SQL / OCaml
Technologies: Rails / Spring / MySQL / Kubernetes / Docker / Ansible / Puppet / Chef / Terraform / AWS
Concepts: Operating Systems / Concurrency / Distributed Systems / Site Reliability Engineering

Experience

Apple | Software Engineering Intern | Sunnyvale, CA Winter 2019

- Reduced CI turnaround time by **2 hours** by implementing intelligent job scheduling and decentralized caching
- Migrated network edge layer to **NGINX**-based software VIPs, enabling granular testing of distributed services
- Developed **Linux daemons** with Go to monitor filesystem and notify state management service of events

Zynga | Software Engineering Intern | Toronto, ON Summer 2018

- Increased CI throughput **50x** by containerizing projects with Docker and scheduling AWS EC2 spot instances
- Provisioned AWS infrastructure by writing **infrastructure as code** using Terraform, Packer, Puppet, and Chef
- Architected a **service-oriented** in-app payments system with Java Spring in a SOX-compliant environment

Shopify | Software Developer Intern | Montréal, QC Fall 2017

- Upgraded core codebase to Ruby 2.4, reducing request latency by **66%** and operation costs by **\$1M+**
- Architected a **zero-downtime** Ruby version upgrade system using multiple clusters and parallel CI pipelines
- Implemented an automated Docker container build system in Go, resulting in **50%** faster builds and deploys

TribalScale | Software Engineering Intern | Toronto, ON Winter 2017

- Architected the NBA Alexa skill on AWS Lambda with NodeJS and MVC design, attracting **1000+** downloads
- Implemented a full-stack resource allocations tool with Ruby on Rails and ReactJS to manage **100K+** records

Mappedin | Software Developer Intern | Kitchener, ON Summer 2016

- Developed an automated blueprinting tool using OpenCV and **Canny Edge Detection** to simplify map import
- Reduced task repetition by implementing a map **templating** system using ReactJS, NodeJS, and MongoDB

Projects

ARM CPU Emulator | OCaml, ARMv4T | amandureja.com/arm-cpu-emu

Software implementation of the ARM7TDMI processor; interprets the full ARMv4T instruction set.

SockServe | C++ | amandureja.com/sock-serve

A low-level, object-oriented HTTP server toolkit programmed using TCP sockets.

Education

University of Waterloo, Honours Bachelor of Software Engineering

2015 – 2020