

Aman Dureja

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Skills

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

Experience

LinkedIn – Systems and Infrastructure Engineering Intern – Sunnyvale, CA Sep – Dec 2019

- Developing a high-throughput, low-latency, distributed graph database and query engine in **C++**

Apple – Software Engineering Intern – Sunnyvale, CA Jan – Apr 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 May – Aug 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 Sep – Dec 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 Jan – Apr 2017

- Developed rich, scalable web applications with **NodeJS**, **Ruby on Rails**, **PostgreSQL**, and **AWS Lambda**

Mappedin – Software Developer Intern – Waterloo, ON May – Aug 2016

- Built a content management system and 3D wayfinding platform with **NodeJS**, **ReactJS**, 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.

Path Tracer – Haskell – amandureja.com/path-tracer

A path tracing library implemented in pure Haskell; supports multiple textures, reflections, and viewing angles.

Education

University of Waterloo, Honours Bachelor of Software Engineering

Sep 2015 – Apr 2020