# ALSTON LIN

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#### **EDUCATION**

#### UNIVERSITY OF WATERLOO

Bachelor of Software Engineering Class of 2020 (Expected)

# NATIONAL UNIVERSITY OF SINGAPORE

Exchange Student January - May 2018

# **LANGUAGES**

#### JavaScript / ES6 Python

Java

C / C++

SQL

Ruby

Bash

Go

#### **FRONT END**

React.js Android

JQuery

#### **BACK END**

Rails

Node.js

PostgreSQL MongoDB

#### **TOOLS**

Docker

**Kubernetes** 

Jenkins

Chef

AWS + GCE + Azure

#### **AWARDS**

WILDHACKS 2015 Second Place

PENNAPPS XIV

Linode Sponsor Prize

QHACKS 2016

**AWS Sponsor Prize** 

CANADIAN COMPUTING COMPETITION

Top 10%

TMX OPTIONS TRADING SIMULATION 36th Place of 1700+

# **WORK EXPERIENCE**

# **PAGERDUTY**

MAY 2018 - ONGOING

#### SITE RELIABILITY ENGINEERING INTERN

San Francisco. California

- Authored a proposal and specification for PagerDuty to use Infrastructure as Code
- Joined the **on call** rotation, conducting and participating in **incident responses**
- Added metrics to the service discovery tool and used them to publish an **uptime SLO**

Ruby, Python, Chef, Docker, Consul, Nomad, Terraform

# **WEBVELOPER**

MARCH 2017 - ONGOING

CO-FOUNDER & LEAD DEVELOPER Palo Alto, California (Remote)

- Led a team of several engineers to develop the web app, generating over \$200k ARR
- Added endpoints to **orchestrate containers** in **Kubernetes** on demand for customers
- Architected a templating framework to allow users to customize their containersDeveloped an online subscription and single charge payment system using Stripe
- Maintained 100% branch-level test coverage across the back end code base

JavaScript / ES6, Node.js, React.js, PostgreSQL, Docker, Kubernetes, Jenkins

YFIP

AUGUST 2017 - DECEMBER 2017

#### SOFTWARE ENGINEERING INTERN - CORE BACKEND

- Created a **code debt tracking service** and integrated it into the code review flow
- Added **automatic msgpack + zlib compression** to Yelp's service and clientlib infrastructure
- Optimized unmarshalling in clientlibs, improving performance by 10%+ for large bodies
- Added TCP health checks to the container infrastructure for all non-HTTP services at Yelp

Python, JavaScript, React.js, Cassandra, Docker

**IBM** 

JAN - APRIL 2017

San Francisco, California

# JAVASCRIPT DEVELOPER (INTERN)

Ottawa, Canada

- Researched and prototyped a migration of Bluemix's infrastructure to Kubernetes
- Developed a CLI to interact with IBM Bluemix's Open Toolchain API
- Migrated the Eclipse Orion codebase from AMD + RequireJS to ES6 + Webpack
- Created a toolchain broker to provision and use **containers** as a dev. environment

JavaScript / ES6, Node.js, Go, CouchDB, Docker, Kubernetes

#### **ENCIRCLE**

MAY - AUG 2016

#### SOFTWARE DEVELOPER (INTERN) - FULL STACK & MOBILE

Kitchener, Canada

- Developed a V8 debugger capable of debugging JavaScript code running on Android
- Built a custom mobile JavaScript integration testing framework
- Created an automated **build script** for the web app using **webpack**
- Incorporated a client side heartbeat for web sockets in the Android and web app

JavaScript, Python, Java, C++, Android, React.js, PostgreSQL, JNI, Docker

#### EVEREST MEDIA GROUP (CLIQ)

JAN - AUG 2016

London, Canada (Remote)

#### FREELANCE DEVELOPER

- Incorporated an online **payment system** to create a **marketplace using Stripe** 

- Developed a music player that includes a track queue and player controls
- Incorporated an analytics dashboard that will keep track of various statistics of a user
- Deployed the app into an AWS production server with blue / green deployment

Ruby, Rails, JavaScript, HTML / CSS, Bootstrap

# **PROJECTS**

Complete list at alstonlin.io

### LEARNING LOCK

See it at bit.ly/2cRZl1x

A lock screen that learns how you unlock your phone to detect and lock out impostors even if they know your pattern. 7500+ Downloads

Android, Java, Machine Learning

#### CALCULALL

See it at bit.ly/1YJ2H7n

An Android calculator that can display fractions, perform indefinite integration, diagonalize matrices, and more. 4000+ Downloads

Android, Java