ALSTON LIN

alstonlin.io | alstonlin812@gmail.com | 415.994.7689 | github.com/AlstonLin

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

Node.js
Rails
PostgreSQL
MongoDB

TOOLS

Docker
Kubernetes
Jenkins
Chef
Terraform
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 - AUGUST 2018
SITE RELIABILITY ENGINEERING INTERN   San Francisco, California
- Authored a proposal and specification for PagerDuty to use **Infrastructure as Code**
- Added a GitHub bot to automatically perform **Terraform** plan and applies on pull requests
- Migrated the infrastructure's **time server topology** to use AWS's dedicated NTP servers
- 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**
- Created a service to **orchestrate containers** in Kubernetes on demand for customers
- Architected a **microservice ecosystem** with a **cloud-native** infrastructure
- Architected a **deployment system** using Spinnaker pipelines to orchestrate Jenkins jobs
- Maintained 100% unit test coverage across the entire back end code base

JavaScript / ES6, Node.js, React.js, Docker, Helm / Kubernetes, Spinnaker, Jest, Terraform

YELP
AUGUST 2017 - DECEMBER 2017
SOFTWARE ENGINEERING INTERN - CORE BACKEND   San Francisco, California
- 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
JAVASCRIPT DEVELOPER (INTERN)   Ottawa, Canada
- Researched and prototyped a **migration of Bluemix's infrastructure to Kubernetes**
- Developed and released a CLI to interact with IBM Bluemix's Open Toolchain API
- 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**
- 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
FREELANCE DEVELOPER   London, Canada (Remote)
- 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

Ruby, Rails, JavaScript, HTML / CSS, Bootstrap

PROJECTS
Complete list at alstonlin.io

LEARNING LOCK   bit.ly/2cRZl1x
An Android calculator that can display
fractions, perform indefinite integration,
diagonalize matrices, and more.
7500+ Downloads
Android, Java, Machine Learning

CALCULALL   bit.ly/1YJ2H7n
A lock screen that learns how you unlock
your phone to detect and lock out impostors
even if they know your pattern.
4000 Downloads
Android, Java