# ALSTON LIN

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## **EDUCATION**

#### UNIVERSITY OF WATERLOO

Bachelor of Software Engineering Class of 2020

# NATIONAL UNIVERSITY OF SINGAPORE

Exchange Student January - May 2018

## LANGUAGES

JavaScript Python

PHP / Hack

Java

C / C++

Objective C

SQL

Ruby

Bash

## **FRONT END**

#### React.js / React Native

Angular.js Android iOS

#### **BACK END**

#### Node.is

Rails GraphQL

#### TOOLS

## Docker / Docker Compose Kubernetes / Helm

Jenkins / Spinnaker

Chef

Terraform

Consul / Nomad

AWS / GCE / Azure

## **PROJECTS**

## **LEARNING LOCK**

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.

5000+ Downloads

Android, Java, Machine Learning

## CALCULALL

bit.ly/1YJ2H7n An Android calculator that can display fractions, perform indefinite integration, diagonalize matrices, and more.

4000+ Downloads Android, Java

## **WORK EXPERIENCE**

## facebook

**SOFTWARE ENGINEER** 

# New York, New York MAR 2017 - JUL 2020

## webveloper

CO-FOUNDER & SOFTWARE ENGINEER

San Francisco, California (Remote)

- Led a team of several engineers to develop the web app, generating over \$200k ARR
- Architected a microservice ecosystem with a cloud-native infrastructure
- Architected a **deployment system** using Spinnaker pipelines to deploy k8s services JavaScript / ES6, Node.is, React.is, Docker, Helm / Kubernetes, Jest, Terraform

## **WATONOMOUS**

**DIRECTOR OF SOFTWARE** 

MAY 2019 - APR 2020

AUG 2020 - ONGOING

Waterloo, Canada

- Led a division of 50+ engineers to develop a level 4 autonomous vehicle
- Coordinated work between perception, processing, path planning and infrastructure teams
- Led the overall system architecture and ensured successful integration between modules ROS, C++, Python

## Google

SEP 2019 - DEC 2019

## SOFTWARE ENGINEERING INTERN - SEARCH ADS

Seattle, Washington

- Added scripts to regularly parse ads pipeline & database metadata to store in a database
- Created a tool to perform common complex queries on ads pipeline & database metadata
- Created a visualizer to **illustrate dependency relationships** between ads pipelines C++, Python, JavaScript, Angular, Flask

## facebook

JAN 2019 - APR 2019

#### SOFTWARE ENGINEERING INTERN - DATING (FULL STACK)

Menlo Park, California

- Added **Instagram integration**, enabling users to show their Instagram profile on Dating
- Created a Dating image picker, fetching photos from their phone, FB, and Instagram
- Migrated the Dating profile page to React Native from native Android / iOS Hack (PHP), JavaScript / Flow, React Native, Java, Android, iOS, Objective C, GraphQL

## pagerduty

## SITE RELIABILITY ENGINEERING INTERN

MAY 2018 - AUG 2018

San Francisco, California

- Authored and implemented a proposal to use Infrastructure as Code using a Github bot
- 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



AUG 2017 - DEC 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 Python, JavaScript, React.js, Cassandra, Docker, Docker Compose

## **IBM**

JAN - APR 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

## **C** Encircle

MAY - AUG 2016

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

Kitchener, Canada

- Developed a V8 debugger capable of debugging JavaScript code running on Android
- Built a custom mobile JavaScript integration testing framework JavaScript, Python, Java, C++, Android, React.js, PostgreSQL, JNI, Docker



#### FREELANCE DEVELOPER

JAN - AUG 2016

London, Canada (Remote)

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

- Incorporated an **analytics dashboard** that will keep track of various statistics of a user Ruby, Rails, JavaScript, HTML / CSS, Bootstrap