





# Raymond Lam

## 4A Software Engineering

 raymondlam12

 raymondlam.xyz

 raymondlam12

 raymond.lam@edu.uwaterloo.ca

### Skills

**Languages:** C++, Python, Java, Swift, JavaScript, SQL

**Technologies:** Presto, Hive, Calcite, MySQL, Kubernetes, Docker, Jenkins, SaltStack, Protobuf, Git

### Experience

#### LinkedIn

Jan. 2019 — Apr. 2019

*Software Engineering Intern | Systems & Infrastructure (Dali)*

*Sunnyvale, CA*

- Worked on SQL translation service built using Java, Apache Calcite, Apache Hive that translates Dali views, virtual tables, defined as HiveQL queries to Spark SQL and Presto SQL
- Implemented feature in SQL translation service that fixes semantically incorrect query translations caused by schema evolution in view definitions containing UNION operators
- Prototyped event-driven reconciliation service for stale schemas of Dali views in Dali Catalog

#### Addepar

May 2018 — Aug. 2018

*Software Engineering Intern | DevOps/SRE*

*Mountain View, CA*

- Worked on internal Flask web server using Python, JavaScript, MySQL, Salt that allows users to deploy pre-configured Kubernetes/AWS development environments to test services
- Created Jenkins pipelines and Python scripts to build, configure and deploy services to testing Kubernetes namespaces and testing AWS EC2 instances
- Led engineering-wide initiative to migrate internal services running on AWS EC2 to Kubernetes

#### Google

Sept. 2017 — Dec. 2017

*Software Developer Intern | Content Ads Experiments*

*Waterloo, ON*

- Designed, implemented, tested an event-driven data pipeline written in C++11 running on Borg that stores historical experiment data in the Colossus distributed file system
- Proposed an experiment diversion point recommendation system based on GoogleSQL queries to the historical experiments dataset

#### Google

Jan. 2017 – Apr. 2017

*Software Developer Intern | Content Ads Experiments*

*Waterloo, ON*

- Redesigned a component of the A/B testing framework used to select experiments in the ad-serving infrastructure to reduce code complexity
- Implemented design and unit testing in C++11, and integration tests in Python

#### Osellus

May 2016 – Aug. 2016

*Software Developer Intern | Mobile iOS*

*Toronto, ON*

- Worked on iOS application using Swift that reinforces learning by presenting resources and administering quizzes (Application: ECHO Learning Reinforcement)
- Improved data retrieval speed by reducing HTTP requests by 80%
- Implemented full offline mode by locally writing and caching data

### Projects

#### Wat's On Campus

Python, JavaScript, MySQL, Flask

- Website that allows Waterloo students to post and find events happening around campus

#### Tilt Tilt

C, Texas Instruments Launchpad, Orbit Booster Pack

- One-player game where the user tilts their device in the direction of arrows that appear on the LCD display

### Education

#### University of Waterloo

Apr. 2020

*Candidate for Bachelor of Software Engineering (BSE)*

GPA: 3.64/4.00