

**jacky zhao.**

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## education.

**University of British Columbia**, 2019 - 2023, B.Sc Computer Science, GPA: 87.9% // CS GPA: 95.0%

## experience.

**Hootsuite**, 05/2020 - 09/2020, Vancouver, Canada - *Software Development Intern*

- Added alerting and monitoring for key SLOs on the paid signup flow with **Grafana** and **Prometheus**.
- Migrated hootsuite.com CMS deployment from **Jenkins** to **ArgoCD**.
- Increased accessibility on signup flow in **React** and added various end-to-end frontend tests with **Jest**.

**MLH Fellowship**, 06/2020 - 09/2020 - *Fellows Class 0*

- Selected as one of 144 fellows to be part of the inaugural class from a pool of 20,000 applicants.
- Worked on **BentoML**, an open-source framework for high-performance ML model serving.
- Built Debian-slim based **Docker** images for model server, reducing base image size to ~40% of its original.
- Added core utility functions to CLI using **Python** and unit tested with **Pytest**.

**Hootsuite**, 07/2019 - 09/2019, Vancouver, Canada - *Highschool Software Development Intern*

- Proposed and implemented a proof of concept service mesh with **Envoy** and **Istio** to break down a **Scala** monolith service into **Dockerized Go** microservices. Deployed through **Kubernetes** and **Jenkins**.
- Defined and implemented SLOs in **SumoLogic** for several tier one services.

**Ann Lee Consulting**, 06/2019 - current, Remote - *Contract Software Engineer*

- Created student and admin site for student management to relieve overdependence on manual work.
- Implemented backend in **Go** for ease of deployment and future scalability. Frontend done using simple **Go** templates. Database deployed on **Mongo Atlas**. Backend **dockerized** and deployed on **AWS EC2**.

## personal projects.

**ctrl-v**, 05/2020 - *Independent Project* - [ctrl-v.app](#)

- Built a modern, open-source Pastebin clone with LaTeX and Markdown rendering support.
- Pastes are stored in a **MongoDB** Atlas instance. Backend is a containerized **Go** service deployed on **Google Cloud Run**. Frontend is a **React** app deployed via **Firebase** Hosting.

**readAR**, 02/2020 - *TreeHacks 2020* - [github.com/jackyzha0/treehacks2020-backend](https://github.com/jackyzha0/treehacks2020-backend)

- Created an AR app to help those with learning disabilities by overlaying hard to read text in a more dyslexic-friendly font, and adds context-dependent word definitions and images.
- Designed and trained a custom BERT model for word sense disambiguation with **PyTorch**, achieving a 76.6% F1% score on the test dataset (SOTA is 81.2%). Model is served via **Flask**.
- Built image processing pipeline using **Flask** and various **Azure** APIs (OCR, Text Analytics, Bing Search).

**reflect**, 11/2019 - *Independent Project* - [getreflect.app](#)

- Built and launched a digital mindfulness extension which asks users to reflect before visiting distracting sites. Currently maintaining 400 concurrent active users.
- Trained an LSTM network in **Keras** on our closed-beta data, reaching ~86% classification accuracy. Model was ported to **Tensorflow.js** where it runs in-browser within the extension which is written in **Typescript**.

## awards.

**Scholarships & Awards:** BCIC Young Innovator Scholarship 2018, Dean of Science Scholarship 2019, Weston Youth Innovation Award National Semifinalist 2019, Canada Wide Science Fair Silver Medal 2018

**Hackathons:** TreeHacks 2020 (Microsoft Azure Champ Prize - Hack for Good), nwHacks 2018 (Top 30, SAP iXp - "Hey SAP, I Got Your Hack" Award, The Wolfram Award), MLH Fellowship Orientation Hackathon 2020 (Finalist)