

jacky zhao.

jzhao.xyz | j.zhao2k19@gmail.com | 778.956.8798 | linkedin.com/in/jackyzhao2019 | github.com/jackyzha0

education & skills.

University of British Columbia, 2019 - 2023, B.Sc Candidate for Computer Science, Vancouver

Skills: Python, Go, TypeScript, Scala, JavaScript, Envoy, Keras, TensorFlow, Flask, SumoLogic, Mongo, SQL

Tools: Jira, Confluence, Jenkins, Kubernetes, Docker, AWS, GCP, Azure, Git, Scrum Agile

experience.

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**.
- Implemented an internal endpoint with **Scala** and **SQL** to assist with data compliance requests.
- Defined SLOs in **SumoLogic** for the Event Bus, Core Authentication, and Social Communications 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.
- Initial implementation with **Pug**, **Javascript**, **Node**, **MongoDB**, and **Express**. Rewrote backend in **Go** to reduce technical debt and increase ease of deployment and future scalability.
- MongoDB instance deployed on **Mongo Atlas**. **Dockerized Go** backend deployed on **AWS EC2**.

personal projects.

reflect, current work in progress - *Independent Project* - github.com/jackyzha0/reflect-nlp

- Building a digital wellbeing extension which asks users to reflect before visiting distracting sites.
- Trained an NLP model using self-collected survey data using **Keras**. Model API is served via **Flask** and deployed on **Google Kubernetes Engine**. CI/CD pipeline done through GitHub webhooks and **CircleCI**.
- Extension built using **Typescript**. Stats aggregation and data collection service using **Go** and **Mongo**.

Speech2Braille, 07/2017 - 05/2018 - *Canada Wide Science Fair* - github.com/jackyzha0/nsound_git

- Created a wearable device to augment the hearing capabilities of the hearing impaired.
- Designed data pipeline with **Python** and **numpy** and trained end-to-end LSTM-CTC speech recognition model with **Tensorflow Python**, achieving 92% of the state-of-the-art word error rate on the TIMIT dataset.
- Created functioning prototype for a device built from an **RPi** to display tactile braille.

readAR, 02/2020 - *TreeHacks 2020* - 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 an API using Flask responsible for our image processing pipeline using various **Azure** APIs (OCR, Text Analytics, Bing Search), hosted on **Azure**.

awards.

Scholarships: BCIC Young Innovator Scholarship 2018, Dean of Science Scholarship 2019, Weston Youth Innovation Award National Semifinalist 2019

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)

Other: Canada Wide Science Fair Silver Medal 2018, Greater Vancouver Regional Science Fair 2018 (Gold Medal, David Laugharne Award, In Ink Scientific Writing Award)