Victor Kobayashi

■ vkobayas@uwaterloo.ca | ★ kobai.github.io | ■ Kobai | ■ vkobay

Skills

Languages: Python, NodeJS, TypeScript, Go, C++, C, Java, Bash, Scheme

Frameworks: PyTorch, Keras, Flask, React, SQL, Git, AWS, Travis-CI, Docker, Kubernetes

Experience _____

Machine Learning Engineer | Zynga

Jan - Apr 2021

- Efficiently streamed event data into AWS Kinesis by integrating fluent-bit into project microservices
- Provisioned and automated microservice deployments to EKS development clusters
- Designed a dynamic event filter to process event data based on real time adjustable filtering criteria
- Maintained and monitored RL pipeline to ensure optimal delivery of over **5000** push notifications per day

Machine Learning Engineer | PerkinElmer

May - Aug 2020

- Investigated machine learning pipeline for bottlenecks and cut down training time by 37%
- Researched GAN evaluation metrics and designed a PCA based metric to assess synthetic data quality
- Introduced test driven development to the AI Research Team and built out an automated unit testing suite
- Conducted research and proposed the use of **Cramer GANs** for synthetic data generation
- Created an image augmentation module to boost image masking performance in low performing areas

Software Developer | ROSS Intelligence

Sep - Dec 2019

- Trained **SpaCy** model to detect citations in legal cases at a higher accuracy than existing models
- Developed sign-up free trials to enable prospective clients to try ROSS while maintaining data privacy
- Built a group discounts feature to encourage solo practitioners to share ROSS with their colleagues
- Created an AWS Lambda service to apply event tracking to over 2000 outbound emails per month
- Automated Serverless function deployments with Travis-CI to minimize deployment errors

Software Engineer | SnapTravel

Jan - Apr 2019

- Boosted SnapTravel's Lighthouse performance score over 400% by making UI components SSR compatible
- Developed an interal tool with **Flask** to simplify and audit bidding on multiple meta-channels
- Built an interface with **Flask** and **Redis** to enable hotel pricing adjustments without developer assistance
- Created Google ads landing page variants for A/B testing in React
- Modernized the A/B testing dashboard and implemented auto-expiring experiments

Software Developer | TemboSocial

May - Aug 2018

- Converted inline email reports into pdf attachments to enable offline accessibility
- Re-designed numerous parts of the platform to improve the user experience with **React**

Projects __

Name That Genre Dec 2019

- Embedding + CNN model that classifies a song's genre based on the song's lyrics
- Model was developed with Keras and achieved F1 scores of up to 0.79

Beat Jan 2018

- Received the **Best UI/UX Hack** award and ranked in the Top 10 hacks at PennApps Retro
- Designed the UI and contributed to the **Ionic** implementation

Education_

University of Waterloo | Cheriton School of Computer Science

(Expected) 2017 - 2022

- Candidate for a Bachelors of Computer Science
- President's Scholarship of Distinction for entrance average of 95+
- Courses: Operating Systems, Algorithms, Cryptography, Statistics, Object Oriented Programming