Victor **Kobayashi**

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Skills

Languages: Python, NodeJS, TypeScript, C++, C, Java, Bash, Scheme
Frameworks: PyTorch, Keras, Flask, FastAPI, React, PostgreSQL, Git, AWS, Travis-CI

Experience

Machine Learning Engineer | PerkinElmer *May - Aug 2020*
- Investigated machine learning pipeline for bottlenecks and cut down training time by **37%**
- Researched evaluation metrics for **GAN**s and designed a **PCA** oriented metric to assess synthetic data quality
- Boosted code quality by proposing and implementing a test suite for utility functions

Software Developer | ROSS Intelligence *Sep - Dec 2019*
- Trained **SpaCy** model to detect citations in legal cases at a higher accuracy than existing models
- Developed secure 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
- Eliminated Serverless function deployment errors and saved developer time by automating it on **Travis-CI**

Software Engineer | SnapTravel *Jan - Apr 2019*
- Boosted SnapTravel's lighthouse performance score over **400%** by making components SSR compatible
- Developed an interal tool with **Flask** to simplify and audit the bidding process on multiple meta-channels
- Built an interface with **Flask** and **Redis** to enable 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 report into pdf attachments to enable offline accessibility
- Re-designed numerous parts of the platform to improve the user experience with **React**

Scouting Leader | FRC Team 610 *Jan - Apr 2017*
- Developed an **android** application to efficiently aggregate match data
- Lead the development of a beta web application to allow team members to scout on their personal devices

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**

PokeType *Mar 2019*
- **CNN** classification model built with **PyTorch** that determines a pokemon's type using its sprite image

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
- Courses: Operating Systems, Algorithms, Cryptography, Statistics, Object Oriented Programming