Philbert Lou

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EDUCATION

UNIVERSITY OF WATERLOO — BACHELOR OF SOFTWARE ENGINEERING *2020 - 2025*

- 3.9 GPA | 89% Cumulative Average

SKILLS

Languages: Python, Javascript, Typescript, Java, C, C++, C#

Technologies: Firebase, ReactJS, NodeJS, Stripe, Express, Django, MongoDB, Microsoft Azure, TensorFlow

WORK EXPERIENCE

PERKUP — *SOFTWARE DEVELOPER* *Waterloo, ON | May 2021 - August 2021*

- Built client-requested frontend features by utilizing **React** in **Javascript** and patched critical user facing bugs such as users being able to create duplicate credit cards, cutting virtual card issuing costs by *50%*
- Revamped the backend monetary management system to support flexible Stripe authorization and transaction assignments towards users' budgets using **Typescript**, **Firebase Cloud Functions**, and **Firestore Database**, significantly boosting user spending power and engagement
- Introduced platform security by implementing **Firebase Authentication**, **Firestore Rules**, and **Google Secrets Manager** to prevent unauthorized access to users' private documents
- Improved developer environment by dynamically enabling and disabling Stripe webhooks, reducing their error rates by *60%* and preventing developers from losing Stripe services due to high error rates

PROJECTS

ESSENTIAL github.com/PhilbertLou/Essential

- Created a secure, health-centric RESTful API using **Node** and **Express** for users to continuously track their water and sugar intake, set goals and restrictions, and build healthy habits
- Utilized **Passport.js** and **bcrypt** to authenticate users and to encrypt passwords stored in **MongoDB**
- Constructed a responsive and user-friendly client interface using **Bootstrap** and dynamically rendered web components using **React**, providing users with their latest data at all times

CLOTHING FORECAST github.com/PhilbertLou/ClothingForecast

- Engineered a neural network using **TensorFlow** libraries that predicts what a user should wear given local weather conditions and temperature
- Created *6937* rows of data to initially train the network using a supervised learning approach and continuously updated it with user data, resulting in more personalized clothing predictions over time
- Developed the backend using **Python** and **Django**, and constructed a responsive frontend website utilizing **HTML**, **CSS**, **Javascript**, and **Bootstrap**

PROFIT PROPHET github.com/ChickanWang/ProfitProphet

- Built a full stack web application using **Flask** and **React** that predicts short-term prices and conducts sentiment analyses based on recent news headlines and discussions for a stock
- Devised a model that predicts hourly prices using a **Microsoft Azure Machine Learning Pipeline**
- Web scraped stock discussions and then analyzed them utilizing **Microsoft Azure Text Analytics API**