Philbert Lou

philbertlou.github.io | philbert.lou@uwaterloo.ca
github.com/PhilbertLou | linkedin.com/in/philbertlou

EDUCATION

BACHELOR OF SOFTWARE ENGINEERING
University of Waterloo, Waterloo, ON | 2020 - 2025

- 3.9 GPA | 91% Cumulative Average

SKILLS

Languages: Python, Java, HTML, CSS, Javascript, C, C#
Technologies: Git, Bootstrap, MongoDB, Express.js, React.js, Node.js, Django, TensorFlow, SQLite

PROJECTS

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 the supervised learning approach and continuously updated it with user data, resulting in more personalized clothing predictions over time
- Developed the backend using **Django** framework, coded in **Python**, and constructed a responsive frontend website utilizing **HTML**, **CSS**, **Javascript**, and **Bootstrap**

ESSENTIAL — github.com/PhilbertLou/Essential

- Created a secure, health-centric **RESTful API** using **Node.js** and **Express.js** 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.js**, providing users with their latest data at all times

CRYPTOPI — github.com/ZhouJas/SE101-CryptoPi

- Collaborated to design a web and mobile application with a **Node.js**, **Express.js**, **MongoDB** backend that allows users to quickly and conveniently send secure Ethereum transactions via NFC technology
- Sent user details, which are stored in NFC tags and readers, from a **Raspberry Pi** to the backend
- Authenticated users and payments using **Microsoft Azure Face API**

DODGE — philbertlou.github.io/dodge

- Published a mobile arcade game on the Google Play Store where users try to avoid moving knives
- Developed the application using **Unity Game Engine**, coded in **C#**, and designed custom assets

WORK EXPERIENCE

TEACHING ASSISTANT
Kumon, Oakville, ON | April 2018 - March 2019

- Privately tutored students English and math material, leading to significant grade improvement
- Administered Kumon employee training through live tutorials and ongoing supervision