

Philips Xu

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SKILLS

Languages	TypeScript, JavaScript, Python, Go, Dart, Java, C++
Frontend	React, Redux, Next.js, HTML, CSS, React Native, Flutter, Android Studio
Backend	Express, Node.js, Flask, GraphQL, MongoDB, MySQL, Docker, AWS, Firebase

EXPERIENCE

Wish / Software Engineer Intern

Sep 2021 – Dec 2021 / Toronto, ON

- Integrated code coverage data generation for **800+** unit tests into CI pipeline for SonarQube coverage analysis
- Implemented address verification feature for new location microservice using **Go**
- Prepared microservice for production by setting up tools to monitor service health using **Grafana** & **Prometheus**
- Utilized **JMeter** to perform load testing and analyze service latency & throughput on address verification endpoint

UW Blueprint / Software Developer

May 2021 – Jan 2021 / Waterloo, ON

PlanetRead

- Built and launched a **React** web platform with a team of 7 developers for an NPO to support translation program
- Implemented various end-to-end user flows and fixed bugs using **React**, **Chakra UI** & **Apollo Client**
- Developed features and **GraphQL** endpoints on **Flask** & **SQLAlchemy** backend, including cursor-based pagination
- Configured Digital Ocean droplet and continuous integration pipeline to serve Flask app using uWSGI & NGINX

Pregnancy Centre

- Developed and launched a **React** web platform serving **700+** users for an NPO to support donation program
- Streamlined admin experience by implementing donation-matching flow using **TypeScript** & **Apollo Client**
- Designed and implemented **MongoDB** schemas and **GraphQL** resolvers using **Apollo Server** on **Node.js** backend

Dagamma Inc. / Software Developer Intern

Jan 2021 – Apr 2021 / Toronto, ON

- Created and launched a **React Native** mobile application on **Android** & **iOS**, acquiring **2000+** users on release
- Served over **6000** recordings by implementing audio recording module using native **Android** & **iOS** APIs
- Eliminated over **90%** of bugs and improved app maintainability by refactoring verbose logic across **30+ React Native** components & re-architecting client state management using **Redux**
- Spearheaded the initial development of a patient-management web platform using **Next.js**, **Redux** & **TypeScript**

PROJECTS

Foodprint | Personal Project

Mar 2020

Flutter, Dart, Express, TypeScript, Heroku, PostgreSQL, AWS S3

- Built and designed a cross-platform **Flutter** mobile application with **Dart** for personal food journaling
- Implemented backend **Express** REST API and **JWT** authentication service from scratch using **TypeScript**, featuring custom token verification and refresh token generation + revocation logic
- Designed the relational **PostgreSQL** database schema and persisted user photos using **AWS S3**
- Applied **Domain-Driven Design** practices by implementing self-validating data objects and abstracting data access logic using the **Repository** pattern

EDUCATION

University of Waterloo

Sep 2019 – Apr 2024 (Expected)

Bachelor of Computer Science, 3rd Year

- Courses: Object-Oriented Programming (Enriched), Data Structures and Data Management