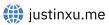
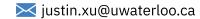
# **Justin Xu**









## **OVERVIEW**

2021

Jan 2021

Aug

May 2020

Aug

2019

May

- takes a careful detail-oriented approach to all work, consistently ensuring well-structured code
- applies strong problem-solving skills to quickly learn unfamiliar technologies and push them beyond ordinary use cases
- languages: Python, TypeScript, C++, C, Swift (iOS), Kotlin (Android), Bash, SQL, GraphQL, CSS
- tools: Node.js, Express.js, React, Jest, Docker, MongoDB, Airflow, Figma

### **WORK EXPERIENCE**

## FairVentures Lab – Solutions Developer

Kitchener, ON (remote)

Python, Bash, TypeScript, Node.js, React, GraphQL, Docker, Airflow

- delivered open-source AI assistants with a focus on making projects developer-friendly, such as by using Docker environment variables to configure dependency injection
- rewrote a collation algorithm to eliminate almost all false positives when extracting insurance claims from scanned loss run documents
- combined image object detection with word2vec to measure the semantic similarity between an image and arbitrary keywords

designed and deployed an Airflow workflow to run nightly integration tests on an email bot

# Wish - Full Stack Software Engineer Intern

Toronto, ON (remote)

Python, MongoDB, SQL, Grafana, GraphQL, TypeScript, React

- built a GraphQL API for merchants to manage marketing, and integrated it in a React frontend
- implemented an A/B test for quality-of-life improvements, and wrote efficient data aggregation scripts to measure a 7.5% increase in product uploads by affected merchants
- prototyped a custom Pylint checker that suggests field projections for PyMongo queries, to reduce latency and network traffic

# Osellus – Mobile Software Developer

Toronto, ON

Swift (iOS), Kotlin (Android), SQL

- developed native iOS and Android features for a microlearning platform
- reduced client-side processing time by 80% by caching data and improving code efficiency
- nominated by employer for Co-op Student of the Year for extensive commitment to app performance, including independent research on efficient Swift data representation

#### **CURRENT PROJECTS**

present Loo Labs – Lead Backend Developer (Founding Member)

Waterloo, ON (remote)

TypeScript, Node.js, Express.js, Jest, React, CSS, Figma

 collaborated in a tight-knit team to ideate, prototype, and do user tests for the flagship product Waterpark, an app that helps UWaterloo students discover clubs and events

図り managing a team of 3 to deliver the Waterpark API, with an emphasis on good development

practices – research, design documentation, code organization, maintainability, and testing

creating a fully-typed REST API framework based on Express.js and Domain-Driven Design

### **EDUCATION**

present University of Waterloo – Honours Computer Science

Waterloo, ON

Candidate – Bachelor of Computer Science, Statistics Minor (2023)

95.28% cumulative average

• CS 241: won the course challenge to implement the most optimal compiler (Winter 2020)

Sep 2020

Sen 2018