Justin Xu

 xujustinj   xujustinj   justinxu.me   justin.xu@uwaterloo.ca

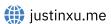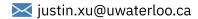## OVERVIEW

- takes a careful, detail-oriented approach to ensure high-quality work
- uses strong problem-solving skills to quickly apply unfamiliar technologies
- brings an innovation mindset to consistently recommend improvements to products and processes
- **languages:** Python, TypeScript, C++, Swift, Java, Kotlin, Bash, SQL
- **tools:** Node.js, Express.js, REST, GraphQL, React, Docker, MongoDB, PostgreSQL, Airflow, Figma

EXPERIENCE

present — **Alloy – Software Developer** — Vancouver, BC
Python, SQL, Java, JUnit, TypeScript, React
Sep 2021
- built an extension to the core algorithm that combines product data from multiple sources
- improved dashboard clarity by creating and integrating performant data fetching endpoints

Apr 2021 — **FairVentures Lab – Solutions Developer** — (remote) Kitchener, ON
Python, Bash, TypeScript, Node.js, React, GraphQL, Docker, Airflow
- built highly-configurable, open-source AI assistants for the insurtech industry
- redesigned a post-processing algorithm to eliminate almost all false positives when parsing text extractions from scanned loss run documents
Jan 2021
- combined object detection with word2vec to semantically match images to keywords

Aug 2020 — **Wish – Full Stack Software Engineer Intern** — (remote) Toronto, ON
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 UI improvements, and wrote efficient scripts to monitor a resulting 7.5% increase in product uploads by affected merchants
May 2020
- prototyped a Pylint checker that suggests efficiency improvements on PyMongo queries

Aug 2019 — **Osellus – Mobile Software Developer** — Toronto, ON
Swift (native iOS), Kotlin (native Android), SQL
May 2019
- nominated for Co-op Student of the Year for investigating ways to improve app performance
- sped up client-side data processing by 80% by caching data and improving code efficiency

COMMUNITY

present — **Loo Labs – Backend Team Lead** — (remote) Waterloo, ON
Docker, TypeScript, Node.js, Express.js, Jest, React, CSS, Figma
- collaborated through a full cycle of the HCI design procress within the founding team
- led backend development of the flagship product *Waterpark*, with an emphasis on documentation, code quality, maintainability, and testing
Sep 2020

EDUCATION

Apr 2023 — **University of Waterloo – Honours Computer Science** — Waterloo, ON
Bachelor of Computer Science, Statistics Minor
Sep 2018
- 95.4% cumulative average
- CS 241: won the course challenge to implement the most optimal compiler (Apr 2020)