Andy Li

andy.li@uwaterloo.ca | linkedin.com/in/andyli11 | github.com/andyli11 | andyli.app

SKILLS

Languages	C++, Java, Python, Javascript, Typescript, Dart	**Frameworks**	Node, Express, React, React Native, Angular, Flutter
DataStores	MySQL, Postgres, Sequelize, MongoDB, Redis	**Cloud & DevOps**	Yarn, NPM, Heroku, Docker, Bash, Git, Linux

WORK EXPERIENCE

Software Engineering Intern
KitchenMate

09/2021 — 12/2021 *Toronto, ON*

- Added support for Adyen display events and webhook notifications to speed up demo UX by 80% and get payment confirmation.
- Implemented card fail action using React and Typescript to test a card on the kiosk emulator that has insufficient funds or otherwise denied pre-auth.
- Built the UI for adding cook steps for recipes using RestAPIs to automate the cooking process for the Smart Cooker when a meal is inserted.
- Created custom assembly sheets and pick lists on the operations web-app using Angular and Node reducing production packaging speeds by 50%.

Software Engineering Intern
Watorace

01/2021 — 04/2021 *Remote*

- Automated a lap timer using C++ to record timings for laps, corners, and straightaways in the ROS2 simulation framework.
- Created a path-optimizer using Python that runs continuously and determines the fastest route after a series of laps.
- Built a new racing-line using MATLAB with the path-optimizer; reducing lap times by 20%.
- Monitored the status of virtual machines and licensing servers using Netdata set up with SSH protocol.

PROJECTS

Residence Reviewer
MongoDB, Express, React, Node

01/2021 — 04/2021

- Created a fullstack web app to help users find residences in a selected area based on reviews and insights.
- Used MongoDB Realm to convert the backend to serverless and host the app on the Cloud.

Reconstruct App
Flutter

Hack the North 2021

- Built a mobile UI to send damage reports and images to a server for analysis using RestAPIs and Firebase.
- Devised a ranking algorithm from budget, cost, damage, population density to triage broken roads.

Angry Flappy Birds
Java

01/2021 — 04/2021

- Created a fully functionable game in Java using object-oriented programming principles and design.
- Implemented motion and projectile physics for the user to dodge obstacles and traps.

AWARDS

4th Place and Rising Star Award in Indy Autonomous Challenge

03/2021

- Controlled a race car in C++ to race 18 university teams from 11 countries in a series of 4 virtual events in the ANSYS VRXperience simulator.

EDUCATION

Computer Engineering, 2A
University of Waterloo

09/2020-05/2025

- President's Scholarship of Distinction
- Culmulative GPA of 4.00