Maggie Chen

✉ m29chen@uwaterloo.ca   ⬛ mxc-maggiechen   🌐 mxc-maggiechen.github.io   in mxc-maggiechen

SKILLS

Languages: Java/Kotlin, C, C++, Python, HTML/CSS, JavaScript, Node, React, SQL
Technologies: Git, Linux, Figma, Android Studio, Heroku

WORK EXPERIENCE

SnapPea Design
Software Engineer

May 2023 - Aug 2023
Kitchener, ON

Technologies used: Java/Kotlin, Android Studio, C++, JavaScript, Node, React, HTML/CSS, Liquid, PostgreSQL

- Developed an **IoT** product that classifies scents through a **neural network** with **>95% accuracy** and created an accompanying **Android mobile application** that enables users to visualize data from multiple sensors transmitted via **Bluetooth Low Energy (BLE)** and customize personal accounts.
- Designed the back end of an IoT product that stores sensor data using a **Firestore** database, safeguarded by **Firebase** authentication, and leveraged the ESP32 **dual core** for direct data transmission from sensors to **Ubidots** over **HTTP**.
- Built and deployed a **PERN** stack web app that manages a **PostgreSQL** database of **15,000+** products, incorporating automated **CRON** jobs to synchronize product updates with the warehouse and notify store owners through **Nodemailer**.
- Integrated **webhooks** into Shopify web stores to process online order creation and cancellations through the drop shipper's **REST API**.
- Implemented custom **Figma** designs for Shopify online stores using **Liquid**, **JavaScript**, and **HTML/CSS**.

EXTRACURRICULARS

Project Tech Conferences
Workshop Coordinator

July 2022 - Now
Waterloo, ON

- Arranged PTC Outreach Core workshops aimed to promote youth engagement in 5+ distinct fields of modern technology (i.e. VR, machine learning, UI/UX design, cybersecurity, game development).
- Coordinated 10+ detailed lesson plans, activity guides, and demonstration recordings that received extremely positive feedback across 7 sub-teams that hosted the workshops.

PROJECTS

Personal Portfolio 🌐 ⬛ React, HTML/CSS, Tailwind

- Designed and implemented a Visual Studio Code-inspired themed website using Tailwind, which incorporates typing animations, hash routing, and was successfully deployed on GitHub Pages.

Zone ⬛ Python

- Developed a **Tkinter** application that utilizes Adhawk eye-tracking software and a custom analysis algorithm to predict real-time user fatigue, coupled with SMS updates through **Twilio** for Hack the North.

Signal Vest ⬛ C

- Developed a biker vest equipped with LED lights, buttons, and sensors that mimic the signaling system of a car, including precise tilt detection, using the **Arduino Uno** with **multi-threading** principles.

EDUCATION

University of Waterloo
Bachelor of Software Engineering, Honours

2022 - Present
Waterloo, ON

Relevant Courses: Statistics, Digital Computers, Foundations of Sequential Programs, Data Abstraction and Implementation