

ADA WANG

GITHUB: github.com/adabingw **LINKEDIN:** [linkedin.com/in/adabingw/](https://www.linkedin.com/in/adabingw/) **EMAIL:** abwang@uwaterloo.ca

Languages

Python, JavaScript, C++/C, SQL, Java, TypeScript, Kotlin

Technologies

React, Electron, Express.js, Flask, Node.js, PostgreSQL, MySQL, AWS

Tools

Git, Tensorflow, PyTorch, Databricks, OpenCV, Redux

EXPERIENCE

Fullstack Software Developer

McAfee LLC | January 2023 - PRESENT

- Conducted end-to-end data analysis on a dataset of over 30 million users using **Databricks** extension **Mosaic**, visualizing large data trends in product updates, alerts, and more.
- Scripted comprehensive **React** and **Redux** unit tests for McAfee Windows Protection with **90%+** coverage.
- Redesigned module mocking and testing mechanisms to enable more thorough and accurate testing of React hooks, dynamic API calls, and telemetry data, resulting in a **21%** reduction in post-release bug reports.
- Modularized React components and async calls to reducing code duplication, leading to a **23%** improvement in the load speed of product alerts and overlays.


Software Developer

MakeSens | May 2022 - August 2022

- Developed an **Android app** using **Java** to record and display real-time **IoT sensor** data transmitted through **Bluetooth Low Energy (BLE)**.
- Improved data transfer by optimizing Bluetooth observer listening to increase update speed by **82%**.
- Develop an integrated simulation framework for pipeline monitoring, stress analysis, and leak detection using **React** and **AWS Amplify**.

Cancer Research Student

University of Calgary, Canadian Science Fair Journal | February 2019 - July 2020

- Published Research paper  in the Canadian Science Fair Journal and led a group of 5 to conduct genome cancer research.
- Determined the prognostic values of genes relevant to Low Grade Glioma to identify potential oncogenes and tumour-suppressing genes that can serve as potential prognostic biomarkers.

PROJECTS

Gradolator

- Created an end-to-end grade management system to dynamically calculate and store grades in real time.
- Implemented a user interface using **React** packaged in **Electron** and integrated it with a **PostgreSQL** backend using **Express.js** and **REST API**.
- Optimized backend queries to only fetch necessary data to reduce response time by **~40%**.

lago (in progress)

- Helped develop a game bot in **python** and **Tensorflow** that employs **deep learning** and the **alphazero** algorithm for turn-based games.
- Implemented gameplay for Othello (reversi) and Go.
- Hosted frontend using **React**, connected to a **Flask** backend.

Convrr

- Developed unit and currency conversion desktop application using **Electron** and **React**.
- Supported **100+ unit categories** stored in a local **JSON** database that implements **fuzzy search** and utilizes Exchangerates **RESTful APIs** to generate a list of real-time exchange-rates data.

EDUCATION

University of Waterloo

Bachelor's Degree, Software Engineering Honours (2021 - 2026)