

Blair McAlpine

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Education

University Of Waterloo - Bachelor Of Computer Science

92% Average

Waterloo, Ontario

Sep. 2020 - Apr. 2025

Unionville High School

96% Average

Markham, Ontario

Sep. 2016 - Jun. 2020

Skills

Languages

C/C++, Python, TypeScript, JavaScript, CSS, GraphQL

Frameworks and Databases

React.js, Node.js, Redux.js, Docker, Jest, PostgreSQL, MongoDB, InfluxDB

Professional Softwares

Git, Datadog, Grafana, Notion, Figma, Microsoft Office, Adobe Photoshop

Experience

Arcturus Networks Inc.

Full Stack Web Developer - Machine Vision

Toronto, Ontario

Jan. 2023 - Apr. 2023

- Full stack web development for the Brinq Edge AI Machine Vision platform
- RESTful API integration and updating alongside PostgreSQL and InfluxDB
- Machine vision inference using C++, web sockets, and Docker
- Highly efficient frontend interactions using Redux, D3.js, Recharts, and SocketIO

Otto Intelligence Inc.

Full Stack Web Developer

Toronto, Ontario

May. 2022 - Sept. 2022

- Full stack mobile-web application development using TypeScript, React, Apollo Client/Server, Prisma and PostgreSQL
- Independently created time-sensitive financial feature sets on a weekly basis
- Developed payment processing, email and logging integrations
- Wrote robust integration and unit tests for GraphQL APIs

Microart Services Inc.

Data Scientist and IT Assistant

Markham, Ontario

May. 2021 - Sept. 2021

- Created a heat map generation tool in Python with UI that visualizes defects on circuit boards (sample images on LinkedIn)
- Wrote Python scripts to compile data from thousands of human entered spreadsheets into a differently formatted master sheet using Pandas, fixing all human errors automatically

Projects

Minimax Algorithm Bots

Python

- Utilized the minimax algorithm to create bots that play common turn based games
- The bots can play Checkers, Connect Four and Tic-Tac-Toe
- All code is available on GitHub for viewing

Custom Wordle Clone

Next.js

- Recreation of the popular word game using Next.js, complete with an on-screen keyboard, colours and sizing
- Responsive layout with adaptive components for any given word
- All code is available on GitHub for viewing