

- **Languages:** JavaScript, C++, Python, SQL, Bash, TypeScript, HTML, CSS
- **Libraries/Frameworks:** React, Redux, Express.js, Mocha, Chai, React Native, Flask, PyTorch
- **Other:** PostgreSQL, Sequelize, MongoDB, Node.js, Git, Postman

## Work Experience

### Web Team Lead / Full Stack Developer – Waterloo (Design Team)

May 2021 – Present

React, Redux, Express.js, Knex.js, Mocha, Chai, TypeScript

- Currently leading a group of **15 members** on the Waterloo web development team in creating a suite of applications, including the main team website, content-management system (CMS), and analytics dashboard, to increase the team's outreach, streamline day-to-day operations, and give executives insight on how to improve management within the team through analytics.
- Built the backend for automated newsletter sign-up on the main website using **Express.js** and **Knex.js** and wrote integration test cases using **Mocha** and **Chai** for high test efficiency when testing the RESTful API endpoints.
- Added features to the CMS on the frontend with **React** and **Redux** as well as the backend with **Express.js** and **Knex.js** to give authorized members the ability to conveniently update teams and recruitments postings listed on the main website.
- Improved responsiveness of the main website using **Typescript** and **media queries** for a better mobile experience.

### Full Stack Developer – Unyte-iLs

May 2021 – August 2021

React, Redux, Express.js, Sequelize, PostgreSQL, Bash, Serverless Framework, AWS

- Contributed to the development of full stack web applications for Unyte-iLs, a provider of programs that improve cognitive, language and social abilities for clients, merging a total of **90 pull requests** across three project codebases.
- Headed the implementation of new features for the user data management application, including displaying customer DEAR and Magento order data, to streamline customer support for the customer service and engineering teams. Updated the application's internal API using **Express.js** and the **Sequelize ORM** to return necessary data to the frontend, developed using **React** and **Redux**.
- Automated the conversion and stitching of **more than 3,000 audio files** for Unyte's Focus mobile application using **Bash scripting** and the FFmpeg library, reducing the time needed to process the files from **several weeks down to one day**.
- Developed and refactored Unyte's automated error identification Slack messaging system using **Express.js** and the **Slack API**, increasing the identification of system errors and customer issues that need to be addressed by **20%**.

### Software Developer in Test – YuJa

January 2020 – April 2020

Selenium WebDriver, Java, TestNG, Jira, TestRail

- Executed and debugged automation tests using **Selenium WebDriver** with **Java** and **TestNG** to verify site functionality for YuJa, a media solutions platform designed for use by educational institutions and enterprises.
- Performed analysis and reporting on **more than 500 Jira tickets** regarding ongoing web, desktop, and mobile application systems.
- Recommended design and functionality aspects for web and mobile application features during daily SCRUM meetings based on client needs, primarily for the YuJa video-conferencing application.

## Projects

### AlgoRacer – [algoracer.herokuapp.com](https://algoracer.herokuapp.com/); [github.com/williamhpark/AlgoRacer](https://github.com/williamhpark/AlgoRacer)

February 2021

React, JavaScript, HTML, CSS

- Created a sorting algorithm visualizer regularly visited by **20+ visitors per month** using **React** to compare the efficiency of a variety of recursive and non-recursive sorting algorithms, including merge, bubble, selection, and insertion sort.

### Resto Bot (Hack the North 2020++) – [devpost.com/software/resto-bot](https://devpost.com/software/resto-bot)

January 2021

Node.js, Express.js, MongoDB, Wit.ai, Facebook Send API, JavaScript

- Developed an automated Facebook Messenger chatbot with natural language processing support using **Wit.ai** to help groups decide on a restaurant to dine at together. Placed as a finalist in the **Best Use of Facebook API** category.
- Configured **webhooks** to establish a communication protocol between the application's **Node.js** server and the **Send API**, and handled payloads sent through webhooks using **JavaScript** to send appropriate callbacks in response to user-to-bot interactions.

## Education

### University of Waterloo – Waterloo, ON

September 2019 – Present

Candidate for BAsC in Computer Engineering