# **BOWEN SUN**

# SKILLS SUMMARY

Languages: Python, JavaScript, TypeScript, HTML/CSS/Sass, Java, C, C#, PHP, SQL Development Tools: Node.js, Express.js, React.js, Angular.js, jQuery, MongoDB, MySQL, Git

#### **WORK EXPERIENCE**

# **Idea Notion Development**

Markham, ON

Software Developer

May 2021 - Present

- Developed AI chatbot dialogs and a registration/customizing car dealership bot API with C# .NET for 20+ car dealerships, and designed a responsive frontend with React, Angular and TypeScript
- Created data visualization dashboards with server-side AJAX processing improving query efficiency
- Built an automated document eSignature workflow in PHP with DocuSign API, reducing document signing and review time by 400% and increasing document validity success

#### **EDUCATION**

# **University of Waterloo**

Waterloo, ON

Honours Computer Science, Co-op

2020 - 2025

 Relevant Coursework: Algorithm Design and Data Abstraction, Functional Programming, Linear Algebra and Proofs, Calculus, Physics

## **VOLUNTEER EXPERIENCE**

#### HackOn Foundation %

Waterloo, ON

Speaker and Workshop Organizer

May 2021

- Organized and spoke at an intro to full stack development workshop for 400+ hackathon attendees
- Programmed, taught and walked-through coding a React and Node COVID tip sharing application live

#### **PROJECTS**

## COVID-19 Geographic Data Visualizer %

Waterloo, ON

JavaScript, CSS, React.js, Mapbox GL

February 2021

- Created an interactive geographic data map displaying the intensity of COVID-19 data for 190 countries
- Designed a UI for users to easily compare data metrics and see additional information through popups

# Projectify: Project Sharing Website %

Waterloo, ON

JavaScript, CSS, Node.js, Express.js, React.js, Redux, MongoDB

January 2021

- Created a back-end server API and database with Node, Express and MongoDB that stores user posts
- Developed a responsive client interface with React for users to view and post projects

# Visual Maze Pathfinder %

Waterloo, ON

JavaScript, HTML/CSS, P5.js December 2020

• Implemented the A\* search algorithm on a 2D grid to find the optimal path through a maze generated with a recursive division method and drew the visual simulation with P5.js

#### Firefighting Bot %

Waterloo, ON

BASIC, TraxMaker, Machinery

January 2020

- Programmed and designed maze solving algorithms in BASIC to navigate a maze and extinguish a flame
- Designed PCB circuit boards and a bot frame equipped with an LCD display, infrared sensors, analog distance sensors and phototransistors to control bot decisions and actions