




Nicholas Lin

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Languages Python, JavaScript, TypeScript, Java, C++, C#, C, PostgreSQL, HTML, CSS/Sass
Frameworks/Tech React, Redux, Flask, MongoDB, Node.js, Express.js, AngularJS, .NET
Utilities Git, Linux, Visual Studio Code, SQL Server, Postman, Arduino, Raspberry Pi

WORK EXPERIENCE

Software Developer | May 2022 – Present

Portable Intelligence Inc. – Markham, ON

- Implemented real-time locating service (RTLS) and expanded tracking region by over **500%** using a **WebSocket** connection programmed in **C#** and **AngularJS**
- Configured database connections using **Microsoft SQL server** to query and process real-time data
- Presented our product in a demo to **60+** international visitors from the Collision Tech Conference and was awarded with June's **Employee of the Month**

Data Analyst | Jan 2019 – Jan 2021

LinkECM Consulting Inc. – Markham, ON

- Managed the raw data of **5000+** stock option trades by creating perspectives using VLOOKUP in **Excel** to maximize future performance and allow for trade analysis

PROJECTS

TimeLine 

- Created a real-time foot traffic web application that allows users to search and filter establishments within their radius based on live popularity times data
- Designed the UI/UX with **HTML**, **CSS**, and **JavaScript** and integrated the **Python** backend using **Flask**
- Utilized the Google Places and Geocoding RESTful **APIs** to generate a list of real-time location data stored as **JSON** objects, and optimized backend to only fetch necessary data to reduce response time by **~50%**
- Selected as the Explore Hacks 2021 **runner-up** out of **58** teams

Ephphatha 

- Developed an American Sign Language (ASL) to English translator using a **Raspberry Pi**
- Implemented the **Picamera** library to capture and standardize the hand signal images for the trained machine learning model to recognize with **97% accuracy**
- Designed a **Flask** web server in **Python** to parse **JSON** objects and transfer the data to the **JavaScript** frontend for real-time translations

Countdown Buddy 

- Developed a Discord bot in **Python** using the **Discord.py API** to allow users to generate their own customizable countdown timer to display in their servers
- Implemented **MongoDB** and **JSON** objects to store the customized attributes of each unique countdown
- Serviced **100+** simultaneous users across multiple servers for a New Year's Eve countdown

SHAD Canada Design Project

- Collaborated with a team of 7 to initiate a business plan that would repurpose old tires into sustainable and stylish furniture as a solution to impactfully reduce Canada's waste
- Achieved the **Most Impactful Award** out of **8** teams after a business pitch to a panel of judges

EDUCATION

Bachelor of Software Engineering | 2021 – 2026

University of Waterloo – Waterloo, ON