# Nicholas Lee

nicklee1757@gmail.com | LinkedIn | Portfolio

#### **Technical Skills**

**Languages:** Python, C++, C#, Java, HTML, CSS, JavaScript, TypeScript, SQL and RStudio

Frameworks: Django Web Framework and React

**Algorithms:** Dynamic Programming, Divide & Conquer, Greedy, Graph Traversals (e.g. BFS, DFS, Djikstra's) **Other Software & Skills:** SQLite, Power BI, RDS, Git, Visual Studio, Hardware Abstraction, MS Office Tools, Linux Scripting, Concurrency, Bash, Agile Methodologies, SDLC, Google BigQuery

## **Projects**

## Web-Based Python Code Execution Environment | May 2024

- Users can write, execute and save code in a web-based <a href="Python3">Python 3 Execution Environment</a>
- The frontend uses **React** (Vite), **TypeScript**, and **Tailwind** CSS for an intuitive interface, while the backend uses **Python** and FastAPI for code execution and management, with local **SQLite** storage

# Implementation of Minimax Algorithm with HTML, CSS, and Javascript | Jan 2023

- Implemented Minimax, a backtracking algorithm, to create an <u>Unbeatable Tic-Tac-Toe Game</u>
- Algorithm implemented with JavaScript, and the responsive UI was made using **HTML** and **CSS**

## Personal Website with HTML, CSS, and Javascript | April 2022

• Applied **HTML**, **CSS** and **JavaScript** fundamentals to create a personal online <u>Website Portfolio</u>

# **Professional Experience**

#### Geotab Inc - Software Developer | Jan 2024 - Apr 2024

- Developed robust **C#** and **.NET** applications, enhancing process efficiency, scalability and reliability
- Utilized **Google BigQuery** to retrieve and analyze large datasets, helping fleet managers find key information to improve processes
- Designed and implemented a back-end API utilizing **C**#, coupled with a dynamic **Typescript** webpage, allowing fleets to seamlessly email HOS logs, enhancing UX and regulatory compliance
- Conducted strategic meetings to develop and implement new features, ensuring all customer requirements were met and aligned with company resources

#### **Tigercat Industries - Software Developer** | Jan 2023 - Apr 2023

- Designed, tested, documented and deployed applications and services using C++, C# and .NET
- Employed **multithreading** in **C++** and **C#** to efficiently retrieve and process device information
- Used Hardware Abstraction techniques to create a **HAL** which facilitated the cross-compatibility between different operating systems and targets
- Constructed a C++ module which facilitated the execution of simple queries on a SQLite database

#### OnCall Health - Junior Solutions Engineer/Account Coordinator | Jan 2022 - Apr 2022

- Increased efficiency of back-end processes through **Python scripting** and **automation**
- Applied critical analysis to develop automated testing, achieving comprehensive test case coverage
- Effectively worked with the **Django** web framework in order to modify and maintain client information and privacy

## **Honours & Awards**

- Consulting Case Competition | Toronto Dominion (TD) Bank iD8 | Semi-Finalist
- University of Toronto National Book Award
- Aldershot Ontario Scholar Award & Governor General's Medal

#### Education

# University of Waterloo - Computer Science | September 2020 - April 2025 Wilfrid Laurier University - Business Administration | September 2020 - April 2025

Double-Degree program

- University of Waterloo President's Scholarship of Distinction | 2021
- Consistent Excellent Standing at both University of Waterloo and Wilfrid Laurier University