Nicholas Maspoch

Hamilton, ON | L8B 0Z6 | nmaspoch.github.io
647-514-4578 | uj23kr@brocku.ca

EDUCATION

Honours Bachelor of Science in Computer Science   Sep 2023 – Dec 2027
Brock University, St. Catharines, ON

Honours Bachelor of Computer Science   Sep 2022 - Apr 2023
University of Western ON, London, ON

TECHNICAL SKILLS

- Web development technologies (Frontend: HTML, CSS, JavaScript; Backend: PHP, MySQL, Node.js) - Proficient.
- Python programming language (File reading; lists, tuples, sets, and dictionaries; exception handling; object-oriented) - Proficient.
- Java programming language (Object-oriented, stacks & heaps, recursion, BST) - Proficient.
- Node.js – Intermediate.
- C# programming language - Intermediate.
- Source and Version Control: Git, Github – Proficient.
- Microsoft Word (Tables, charts, lists, graphics) – Proficient.
- Microsoft Excel (Functions, regression analysis) – Proficient.
- Microsoft PowerPoint (Slideshow, animation) - Proficient.

ACADEMIC PROJECT EXPERIENCE

Fitness Plan   Jul 2024- Present
Hamilton, ON
- Created a website developed using Node.js and Express that generates a personalized fitness plan from a set of user preferences.
- Generated the fitness plan by using the OpenAI API.
- Saved users' information using Sequelize to store it in a MySQL database.

Star Wars Encyclopedia   Jun 2024 - Present
Hamilton, ON
- Applied knowledge of JSON, REST, and the browser fetch API by requesting data of various categories pertaining to the Star Wars franchise and parsing the data from the JSON objects returned by the request, with the result being returned in a single page app (SPA).
- Implemented SPA by calling functions correlating to each category, resulting in DOM being cleared and new HTML elements being dynamically generated every time the user selects a category.

House Value Predictor   Jun 2024
Hamilton, ON
- Created a Python program to predict house prices by testing various machine learning models such as linear regression to identify the most accurate model.
- Optimized machine learning model by applying methods such as feature scaling and regularization; creating graphs to identify which outliers to remove; and splitting data into training, cross-validation, and test sets; to fine-tune model parameters and deliver more accurate results.

Personal Website   Sep 2023 - Present
Hamilton, ON
- Created website from scratch using HTML, CSS, and JavaScript to serve as portfolio to highlight frontend experience and creativity.
- Backed up website by using GitHub, allowing for change tracking and file history.

PROJECTS (CONTINUED)

Exploration of Data Structures   Jun 2023 - Present
Hamilton, ON
- Expanded knowledge of object-oriented programming (OOP) by using Java to implement stacks, queues, and binary search trees.
- Reduced bugs by applying unit testing and various debugging techniques to verify implementation.

First Person Shooter Demo   Jun 2023 - Aug 2023
Hamilton, ON
- Designed small first-person shooter video game in the Unity Game Engine using C#, with features such as player and weapon classes, and advanced movement abilities such as a grapple hook.
- Developed transferable skills by applying C# concepts such as OOP, serialization, and structs to implement game features.

WORK EXPERIENCE

Website Developer   Jul 2021 - Present
ZytechSoft, Mississauga, ON
- Implemented 10% decrease in loading times for a software consulting company's website by coordinating with stakeholders and graphic designer to deliver a responsive and professional business product.
- Contributed to marketing of website by writing blog posts describing the company's projects, resulting in greater transparency to potential clients.

EXTRACURRICULAR EXPERIENCE

Member of Makeshift Robotics (4039)   Oct 2018 - Jun 2022
St. Mary Catholic Secondary School, Hamilton, ON
- Coordinated a group of six scouts to efficiently communicate and analyze robots during competitions to help the team move on to provincial and world championships.
- Marketed team annually to local businesses such as Pulse Microsystems by leveraging public speaking and PowerPoint skills to raise funds.
- Led overhaul of team website by teaching members WordPress and assigning different tasks to update and maintain website.
- Increased number of female team members by 50% by recording material for Girls R Brilliant campaign, made to encourage girls to pursue a career in Science, Technology, Engineering, and Math (STEM).
- Developed novices' sense of camaraderie by collaborating through icebreaking activities to acclimate being part of team.

ACADEMIC AWARDS

Director's Award for Academic Excellence.   Sep 2019 - Sep 2021
St. Mary Catholic Secondary School, Hamilton, ON
- Achieved being one of top two males in grade from grades 9-11 with averages of 94, 97, and 96 respectively, resulting in recognition for academic proficiency.

Honour Roll Recipient   Sep 2019 - Sep 2021
St. Mary Catholic Secondary School, Hamilton, ON
- Recognized annually for maintaining an average of 80 or greater by achieving averages of 94, 97, 96, and 95 throughout four years of high school.