JACK MCASH

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hand-burger.github.io/portfolio jack-mcash hand-burger

EDUCATION

University of Toronto Sept. 2022 - May 2027
HBSc. Computer Science and Mathematical Sciences GPA: 3.89

St. Mary's High School Sept. 2018 - June 2022
Ontario Secondary School Diploma GPA: 4.0

EXPERIENCE

Teaching Assistant, University of Toronto Department of Mathematical and Computational Sciences
Aug. 2024 - Present

- Prepared and delivered tutorials for over 100 students in the following courses:
  CSC236: Introduction to the Theory of Computation. **MAT135**: Differential Calculus.
- Graded assignments and provided feedback to students.
- Held office hours to assist students with course material.

PROJECTS

SiteSynth Dynamic Website Generator devpost.com/software/sitesynth 2023

- A dynamic website generator which transforms natural language input into a clean formatted and stylized website.
- Uses the power of Cohere's generate API and Large Language Models to streamline the web development process.

OpenCV Rubik's Cube Solver hand-burger/Rubiks-Cube-Solver 2022

- C++ computer vision program which scans a Rubik's cube and quickly outputs a solution.
- Made using C++ and the OpenCV library.

Hamiltonian Snake hand-burger/hamiltonian-snake 2020

- Game of snake which plays itself by generating a Hamiltonian circuit, which ensures it will always win.
- Made using JavaScript and HTML.

SKILLS

Programming Languages, Frameworks and Technologies
Python, C++, C, Java, LaTeX, Git. HTML/CSS, JavaScript. Competitive Programming, Computer Vision, Robotics. PyTorch, Django, Machine Learning, Web Scraping.

AWARDS AND SCHOLARSHIPS

Entrance Scholarship , University of Toronto 2022 - 2026
UofT $12,000 Renewable scholarship awarded for 98% average.

Dean's List Scholar, University of Toronto 2023 - 2024
Awarded for having above a 3.50 GPA.

RELEVANT COURSES

Computer Science: CSC263: Data Structures and Analysis. CSC207: Software Design. CSC209: Software Tools and Systems Programming. CSC236: Introduction to the Theory of Computation.
Mathematics: MAT244: Ordinary Differential Equations. MAT224: Linear Algebra II. MAT232: Calculus of Several Variables.
Statistics: STA256: Probability and Statistics I. STA260: Probability and Statistics II.