

Francis Madarang

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EDUCATION

University of Waterloo

Bachelor of Computer Science

Waterloo, ON

Sept. 2023 – Present

- Current Coursework: Functional Programming, Algorithms and Abstraction, Algebra

University of Toronto

Bachelor of Science in Computer Science (Specialist), GPA: 4.0

Toronto, ON

Sept. 2022 – Aug. 2023

- Reuben Wells Leonard Scholarship Recipient, Dean's List Scholar
- A+ in Linear Algebra, Calculus (Proofs), Multivariable Calculus (Proofs), Foundations of CS I & II
- Led study groups for Computer Science and Math courses

St. Augustine Catholic High School

OSSD, STEM+ Diploma, Information Technology Specialist (SHSM), GPA: 98%

Markham, ON

Sept. 2018 – June 2022

- Led FTC Robotics Team to qualify for the provincial championships
- Represented school at University of Waterloo's Canadian Team Math Contest - Earned 3rd Place

PROJECTS

Todo App | *React.js, Django, SQLite, Cookies & Security*

Aug. 2023 – Sept. 2023

- Created a REST API to interact with database containing user login and task data.
- Implemented a secure session system to avoid compromising private user data.

DeepPoker: CSC111 Project | *Python, pygame, AI, Simulations*

Feb. 2023 – Apr. 2023

- Developed an AI that makes optimal poker moves based on the current game state of a game of poker
- Implemented poker and a poker simulator to obtain training data for the AI
- Implemented different playstyles of poker so the AI could learn from a wide range of playstyles
- Created a GUI for users to play against a trained version of the AI

Scrap Fighter | *Java, SocketIO, Swing*

Dec. 2021 – Jan. 2022

- Implemented a networked street fighter game with a physics engine and hitbox detection
- Created a GUI for users to practice their mechanics, change their settings and choose their fighters
- Implemented a desync system to ensure the host does not have a competitive advantage over client

EXPERIENCE

Coding Instructor

Code Ninjas Richmond Hill

July 2022 – Sept. 2022

Markham, ON

- Taught classes of up to 20 children aged 5-14 how to program in Python, Java, Lua and Scratch
- Architected curricula based on the varying skill levels, learning preferences and learning speeds of students

AWARDS

Math and Science Awards

- University of Waterloo 2022 Canadian Team Math Contest - 3rd Place
- University of Waterloo 2022 Euclid Math Contest - Top 8%
- University of Waterloo 2022 Chem13 News Contest - Elemental Tile Achiever
- Highest Achiever Awards: Gr. 10-12 Computer Science, Gr. 12 Physics

Assorted Awards

- DECA Provincial Representative
- Toastmaster Speechcraft Contest - 2nd Place

TECHNICAL SKILLS

Languages: Java, Python, C++, SQLite, JavaScript, HTML/CSS

Frameworks: Django, Node.js, React.js, Swing

Developer Tools: Git, Amazon Web Services, UNIX, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Libraries: pandas, NumPy, plotly, Apache