# Francis Madarang

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## Profile

An ambitious computer scientist who thrives in fast-paced and competitive settings. Francis believes anything can be achieved through proper goal-setting, a cool head, and unwavering grit. When he is not programming, he enjoys reading books, cooking, and contemplating the bigger picture.

# **EDUCATION**

# University of Waterloo

Waterloo, ON

Bachelor of Computer Science (Co-op), GPA: 4.0

Sept. 2023 - Present

- Current Coursework: Object-Oriented Programming, Data Structures (Enriched), Digital Hardware
- A+ in Functional Programming, Algorithms and Abstraction, Linux & Software Engineering Tools with C/C++

## University of Toronto (St. George)

Toronto, ON

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

Sept. 2022 - Present

- Dr. James A. & Connie P. Dickson Scholarship In Science & Mathematics
- Reuben Wells Leonard Scholarship
- A+ in Linear Algebra, Calculus (Proofs), Multivariable Calculus (Proofs), Foundations of CS I & II
- Dean's List Scholar

# SKILL SUMMARY

Team Player: worked with and managed others in large, fast-paced team projects.

Communication Skills: faced customers, students, and peers at various volunteering, teaching and showcase events.

Quick Learner: consistently successful and demonstrates excellence across intense settings.

Languages: C/C++, Java, Python, JavaScript (TypeScript), HTML/CSS

Frameworks/Tools: Django, React.js, Vite.js, ElectronJS, Jest, TailwindCSS, Git, AWS (EC2), Apache, UNIX, Figma

<u>Libraries</u>: OpenCV, NumPy, Tensorflow

## **PROJECTS**

## $AIPlay4U \mid C++, OpenCV, React.js, Vite.js, TailwindCSS$

Dec. 2023 – Present

- Created a scripting language for users to make scripts that automate tasks using computer vision.
- Built a "scratch clone" with ElectronJS, Vite.js, React.js and TailwindCSS and maintained it using Jest.
- Trained object detection cascades for common objects using OpenCV.

## Vid2Notes | React.js, TailwindCSS, Next.js, Django, Python

Nov. 2023

- Led a team of 4 in creating a full stack application that summarizes YouTube videoes.
- Used generative AI to turn video summaries into flashcards.

#### Sinnoh Stores | React.js, TailwindCSS, Next.js, Django

Sept. 2023 – Oct. 2023

- Used Figma, React.js and TailwindCSS to design and create a mobile friendly, interactive user interface for users to browse through products
- Created a REST API that handles requests for retrieving and inserting data about products and carts.
- Implemented a secure session system to avoid compromising cart orders.

#### EXPERIENCE

#### Coding Instructor

July 2022 - Sept. 2022

Richmond Hill, ON

Code Ninjas Richmond Hill

- 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, increasing student and parent satisfaction by 25%

## 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