Hy Lac Nguyen

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EDUCATION

University of Waterloo — Waterloo, ON
*Bachelor's of Computer Science, **3.94/4.00 GPA*** — *Sept. 2024 – May 2029*

TECHNICAL SKILLS

Languages: Python, C, C++, JavaScript, TypeScript, HTML/CSS, SQL, Bash, Racket
Frameworks/Libraries: React, Pygame, NumPy, OpenCV, Tkinter, Matplotlib, FastAPI

PROJECTS

Centsible Cooking | *React, TypeScript, Tailwind CSS, Git* — Jan 2025 – Jan 2025
- Prototyped a **React** app written in **TypeScript** to teach students how to cook and save money
- Integrated Gemini REST API to power the recipe generation functionality
- Worked in a team of two to deliver a functional prototype within a tight **24-hour** hackathon timeframe

Hangman Helper | *Python, Matplotlib, NumPy, Tkinter* — Dec 2024 – Jan 2025
- Developed a **Python** application to assist users in solving hangman puzzles
- Designed an intuitive GUI using **Tkinter** for seamless user interaction
- Integrated **Matplotlib** to visually represent letter probabilities, improving decision-making accuracy

Goose Clicker | *HTML/CSS, JavaScript* — Sept 2024 – Dec 2024
- Developed a web game inspired by Cookie Clicker using **HTML/CSS** and **JavaScript**
- Designed a responsive user interface to ensure compatibility on various devices and screen sizes
- Designed and implemented a balanced progression system with **9 items**, as well as **25 upgrades**

Canadian Computing Competition (CCC) Solutions | *C++* — Sept 2022 – Aug 2024
- Wrote full solutions for **100+** CCC problems in **C++**
- **20 stars** and **1 fork** on Github, averaging **20+ views** daily

Pirates of the Dead | *Python, Pygame, Git* — July 2022 – July 2022
- Developed a platformer game in **1 week** using only **Pygame** for the Pygame Summer Jam 2022
- Collaborated with other developers using **Git** for version control and efficient file management
- Implemented core gameplay features such as items and a health system

EXPERIENCE

Math Club Executive — Sep. 2022 – June 2024
Streetsville Secondary School — *Mississauga, ON*
- Hosted mock math contests to help students prepare for the University of Waterloo's math contests
- Helped host school's derivative bee with **50+** attendees and $100+ in prizes, creating contest problems, teaching students calculus, in addition to reaching out and securing 3 teachers to act as judges

Coding Club Executive — Sept 2021 – June 2024
Streetsville Secondary School — *Mississauga, ON*
- Hosted live game development sessions, teaching **30+** students the basics of Pygame
- Hosted live Canadian Computing Competition review sessions, solving previous year's problems in **C++**
- Taught **50+** beginner students how to code in Python and provided additional practice problems

AWARDS

Governor General's Bronze Medal - Highest academic standing at Streetsville Secondary School