

JENNIFER YU

✉ jennifer.yu2@uwaterloo.ca | [in/jennifer-yu-on](https://www.linkedin.com/in/jennifer-yu-on) | github.com/JenniferYu-8 | jennifer-yu.vercel.app

SKILLS

Languages: Java, Python, C, HTML, CSS/SASS, JavaScript, TypeScript, Dart

Tools/Frameworks: React, Next.js, Tailwind CSS, Flutter, Figma, Git, Firebase, SQL, Flask, OpenCV, TensorFlow, Keras, Scikit-learn, dlib

EDUCATION

UNIVERSITY OF WATERLOO | GPA: 4.0/4.0

Sept. 2024 - Apr. 2029

Software Engineering, Honours, Co-operative Program

Awards: Arthur F. Church Entrance Scholarship for Women in Engineering, President's Scholarship of Distinction

Activities/Societies: Wat.ai (Core Researcher), Waterloo Engineering Society (Website Director), SE Society (Class Rep)

EXPERIENCE

SOFTWARE ENGINEER TEAM LEAD

July 2021 - Present

Bit by Bit Coding

- Assembling and overseeing a team of **8 software developers** ranging from entry-level to graduate-level experience.
- Developing interactive demos with **HTML, CSS, & JS** that have **taught 1000+ middle schoolers**—from **8 countries**—to code.
- Providing team members with feedback on the **UI/UX** of the demos to facilitate learning for middle school students.
- Assisting Executive Leadership with designing the new interview process for prospective Software Engineer Team members.

UNDER-SECRETARY-GENERAL (USG) OF TECHNOLOGY

Dec. 2022 - Aug. 2024

Canada Model United Nations (CANMUN)

- Designed and developed the official responsive CANMUN website from scratch using **HTML, CSS, and JavaScript**.
- Collaborated with **70+ staff members** to organize the **1st iteration** of the 3-day nationwide conference for **300+ delegates**.
- Communicated with the **19 members** of the Secretariat to promptly update the website's information and ensure accuracy.
- Achieved over **10,000 monthly pageviews**, delivering a reliable and engaging platform for **500+ stakeholders**.

CO-CHAIR

May 2022 - June 2024

York Region Hacks (YRHacks)

- Led a team of **15 students**—from **9 different schools**—to organize the **largest annual high school hackathon in Canada**.
 - Provided **1000+ students**—cumulatively over 3 years—from **25+ schools**, with the opportunity to experience a hackathon.
 - Organized **30+** workshops to educate participants on computer science topics such as cybersecurity and app development.
 - Coordinated with administrative staff from **8+ schools** to ensure a safe event in compliance with school board policies.
-

PROJECTS

G.L.A.S.S.E.S. [↗](#) | *Python, Flask, React, JavaScript, Raspberry Pi, Git, Shazamio, textyl.co API*

Oct. 2024 - Dec. 2024

Design Project

- Designed and developed **smart glasses** with a built-in display and live audio recording to detect songs and display lyrics.
- Collaborated with the team to cohesively integrate the **Raspberry Pi**, display module, **React** mobile app, and servers.
- Integrated song recognition and real-time lyric synchronization while enabling smooth scrolling text display on the OLED.

REMBERU [↗](#) | *Flutter, Flask, Firebase, OpenCV, Gemini API, Symphonic Labs API*

Sept. 2024 - Sept. 2024

Hack the North

- Developed an **AI-powered social interaction device** that uses lip-reading and facial recognition to recall conversations.
- Integrated **Gemini** and **Symphonic Labs APIs** to lip-read, transcribe, and concisely summarize conversations in real-time.
- Acquired proficiency in **Flutter** and **Firebase**—within a short development cycle—through hands-on implementation.

FACIAL EMOTION DETECTION [↗](#) | *Python, TensorFlow, Keras, OpenCV, Scikit-learn, dlib*

July 2023 - Aug. 2023

Inspirit AI

- Tested and evaluated multiple machine learning models, including **k-NN**, **logistic regression**, and **decision trees**.
- Implemented a **multilayer perceptron**, achieving **over 74% accuracy** across 5 emotion categories & winning "**Best Project**."
- Integrated real-time video processing capabilities with the MLP model, enabling immediate facial detection.