

# WILLIAM YANG

+1-647-636-8386 | [w259yang@uwaterloo.ca](mailto:w259yang@uwaterloo.ca) | [LinkedIn](#) | [GitHub](#)

## EDUCATION

### • University of Waterloo

Honours Bachelor of Software Engineering, Co-op

September 2025 - April 2030

Waterloo, Canada

## EXPERIENCE

### • Software Developer

Digital Flight Dynamics

March 2025 - Present

Remote

- Engineered high-fidelity instrument replicas using React and SVG, for a **study-level simulation** of the Airbus A350-1000 in Microsoft Flight Simulator
- Optimized component modularity in personal code, reducing code bloat by **~40%**
- Actively contributed through pull requests, code reviews, and issue tracking using a professional GitHub workflow in a **5M+ line codebase**

### • Competitive Programming Tutor

MMHS Computer Science Club

September 2023 - March 2025

Markham, Canada

- Mentored groups of **5–10 students** in over **20+ club sessions**, improving problem-solving skills and preparing students for programming contests
- Developed lesson plans covering Python, data structures, and algorithms for various skill levels
- Monitored student engagement through centralized attendance to adapt sessions based on student needs

## PROJECTS

### • Canadian Computing Competition Solutions Repository

React.js, TailwindCSS, JavaScript, PocketBase

September 2024 - Present



- Revamped, scaled, and open-sourced the largest solution repository for the CCC in **3 weeks**, with **3,000+ users** and **270+ curated solutions**
- Leveraged Python to automate, standardize, and simplify access to **1,000+ test cases** for CCC problems
- Migrated legacy HTML-only site to a modern and responsive React.js + TailwindCSS interface
- Integrated PocketBase for a community forum, allowing **dozens** of new user-submitted solutions

### • A350 Flight Management System Portfolio

Next.js, TypeScript, React.js, TailwindCSS, SVG

August 2025 - Present



- Designed a true-to-life Airbus A350 FMS-styled portfolio to showcase passion of aviation and tech
- Modeled functional cockpit printer, and other subsystems to highlight careful attention to detail
- Heavily utilized SVG for custom graphics inspired by real Airbus UI

## HONORS AND AWARDS

### • Wolfram Award for Best Use of API - IgnitionHacks 2024

React.js, Wolfram Alpha API, TensorFlow.js, OpenAI API

August 2024



- Selected as one of **9** winning projects out of **434** participants at IgnitionHacks 2024
- Developed Mathify in **36 hours**, a web-app which generates video solutions to math problems in the style of 3Blue1Brown

### • Second Place Overall - RecessHacks 4.0

Python, OpenAI API, React.js

September 2024



- Achieved **2nd** place out of **200+** participants at RecessHacks 4.0
- Built NoteConvert in **48 hours**, an AI web-app that transforms audio recordings into structured notes

### • Software Engineering Entrance Scholarship

University of Waterloo

May 2025

- Awarded to **several outstanding** students for academic excellence and extracurricular initiative

## SKILLS

### • Programming Languages: Python, JavaScript, TypeScript, C, C++

### • Technologies & Frameworks: React.js, TailwindCSS, Next.js, SvelteKit, Bootstrap, Vercel, Django, PocketBase, PyGame, Git, SQLite, PostgreSQL