

# Ayden Xu

919-259-8322 | [aydenx@andrew.cmu.edu](mailto:aydenx@andrew.cmu.edu) | [Website](#)  
[LinkedIn](#) | [GitHub](#)

## EDUCATION

### Carnegie Mellon University

June 2026

*Bachelor of Science in Information Systems*

*Pittsburgh, Pennsylvania*

- Relevant Coursework: Data Structures, Intro to ML, Intro to Deep Learning, Natural Language Processing, Database Design, Linear Algebra, Discrete Math, Probability Theory, Statistics

## SKILLS

**Languages/Frameworks:** Python, Java, C, React, HTML, CSS, Javascript, Swift, SQL, Streamlit, Flutter

**Technologies:** Git, MySQL, AWS Cloud, Typescript, Langchain, Hugging Face, GPT4, Figma, Adobe CC

## EXPERIENCE

### LASTWALL NETWORKS

June 2023-August 2023

*Associate Software Developer*

*Fredericton, New Brunswick*

- Achieved universal responsiveness for the UI of all devices using React
- Elevated precision of risk based authentication software to 80% through rigorous code testing in Typescript and analysis of user datasets such as keystroke cadence with PostgreSQL
- Adhered to NIST compliance guidelines throughout the entire development process
- Actively engaged in cross-functional team sprints and daily scrums in an Agile environment

## PROJECTS

**Portfolio** | [Github](#) | [Link](#) | (React, MaterialUI)

Aug 2023

- Built a minimal and responsive portfolio from scratch using React

**GenAI** | [Diagram](#) | [Github](#) | [Link](#) | (Streamlit, OpenAI, Langchain)

Jun 2023-Jul 2023

- Utilized Langchain as the orchestration framework for integrating GenAI models and APIs together for unique functionalities
- Explored GPT4 function calling capabilities using web services such as SerpAPI and RapidAPI
- Applied GPT4 prompt engineering to fine tune and optimize model responses
- Utilized Streamlit as the frontend to showcase the outputs of the application demos

**Amplify Web App** | [Github](#) | (AWS Cloud, Next.js, CRUD)

Dec 2022

- Full-stack app using Next.js as frontend with CRUD functionalities using AWS
- Datastore used to create data models and Amplify to host the web app
- Implemented authentication with Cognito and file storage on S3

**Penguin Shooter** | [Demo](#) | [Code](#) | (Python, Tkinter)

Oct 2022

- 2D Survival game featuring a penguin made in Python
- Implemented pathfinding algorithms for the enemy, and projectile motion for the bullets
- Utilized Object-Oriented Programming to better track player and enemy properties

**EcoEye** | (Mobile) | [Demo](#) | (Flutter, Firebase, IBM Watson)

May 2020

- Used Google Image and IBM Watson APIs to label and classify various waste after taking or uploading an image. Used Firebase as the database for storing past snapshots.
- Developed the frontend with Flutter which is compiled to run on both Android and iOS.
- Awarded with President's Environmental Youth Award