

Amber Xiao

1 Tracy Terrace, Bryn Mawr, PA, 19010 • (484)-242-9388

amberx@seas.upenn.edu • www.github.com/embrexin

Education

University of Pennsylvania

Philadelphia, PA

BSE in Computer Science

2023 - 2027

- **Relevant Coursework:** Data Structures and Algorithms, Human Computer Interaction, UX and UI Design, Big Data Analytics, Artificial Intelligence, iOS Programming

Skills

Languages: HTML/CSS, JavaScript (React, Node.js, Next.js), Typescript, Swift, C, C++, Java, Python, OCaml

Tools: VS Code, Visual Studio, Google Colab, MySQL, Jupyter Notebook, Github Desktop, Docker, XCode, Cursor, Gemini CLI

Design: Adobe CC (Illustrator, InDesign, Photoshop, Premiere Pro), Procreate, Figma

Personal Projects

PetSteps: [Adobe Digital Edge Awards Winner 2024](#)

- Developed a fitness game in **Swift** using **XCode** aimed at encouraging users to exercise while having fun, targeting a wide age range
- Implemented MVVM architecture, CoreLocation framework, ARKit, Weather API, and Google Gemini API for AI exercising assistant

Personal Portfolio Websites

- Developed two personal websites to showcase [Computer Science](#) and [Illustration](#) work from scratch using **HTML**, **CSS**, and **JavaScript**

Colorectal Cancer Analysis: <https://github.com/embrexin/Colorectal-Cancer-Analysis/>

- Conducted a comprehensive data analysis of 150,000+ row dataset of patients diagnosed with colorectal cancer using **Python**
- Analysis includes Data Cleaning, Data Visualization, Exploratory Data Analysis, and Predictive Modeling (Random Forest).

Work Experience

Incoming Quant Research Intern at Aigen Investment Management

Dec 2025 - Jan 2026

University of Pennsylvania AI for Ambulatory Care Innovation (AI-4-AI) Lab (PI: Prof. Kevin Johnson)

Philadelphia, PA

Undergraduate Researcher

Oct 2025 - Present

- Integrated Python data analysis with Javascript visualizations for the Observer Repository project
- Developed and streamlined aggregate metadata search function for multimodal clinical data in the Observer Repository

Teaching Assistant – iOS Programming

Philadelphia, PA

- Supported instruction to **25+ students** in **Swift**, **Xcode**, and **UIKit** through labs, office hours, and project guidance
- Graded assignments and provided personalized feedback to strengthen students' coding and app design skills

Duet Inc.

Remote

Software Engineer Intern

June 2025 - Sept 2025

- Presented, designed in **Figma**, and developed two full websites from scratch to industry professionals, including:
 - A **Help Center** website for the Duet webapp to improve customer support resources
 - A **Conference website** to showcase Duet's upcoming industry event presence
- Built responsive, user-friendly front-end interfaces integrated with Duet's tech stack using **HTML**, **CSS**, **JavaScript**, and third-party plugins such as **Bootstrap** and **jQuery**
- Conducted research on potential **AI feature integrations** for Duet to enhance user experience

Tous Les Jours Bakery and Cafe

Haverford, PA

Barista and Assistant Manager

Sept 2022 - Aug 2025

- Serviced clients, handled cash register operations and, performed end of day reconciliation
- Trained **3+** new hires on using the POS system, drink preparation, and customer service protocol

Clubs and Organizations

UPGRADE

Philadelphia, PA

- Developer and artist for 2 full games and 2 mini-games for UPGRADE, the premiere game development club at the University of Pennsylvania

Sept 2023 - Present

Pencilbite Studio

Philadelphia, PA

- Character artist for Pencilbite Studio, the student-run animation studio at the University of Pennsylvania

Sept 2024 - Present