# Amy Chen

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#### **EDUCATION**

#### Carnegie Mellon University

August 2024 - May 2027 Expected

Bachelor of Science in Computer Science | GPA: 4.0/4.0

Pittsburgh, PA

- Relevant coursework: Ethics & Policy Issues in Computing, Computer Graphics, Parallel and Sequential Data Structures & Algorithms, Great Ideas in Theoretical CS, Mathematical Foundations of CS, Principles of Imperative Computation, Principles of Functional Programming,

#### TECHNICAL SKILLS AND INTERESTS

Programming Languages: Java, C++, C#, C, Python, SML, Java Swing, HTML, CSS, Julia, Racket, Latex

Developer Tools: Unity, Git, Perforce, Android Studio, Visual Studio Code, Eclipse, Vim

Soft Skills: Leadership, Organization, Communication, Independence, Flexibility

Tools: Adobe Suite, Google Suite, Office 365, Trello, Gantt, Notion, Slack

Areas of Interest: Assistive technology, UI/UX, Game Development, Theoretical CS, Computer Graphics

#### WORK EXPERIENCE

## • TA, Great Ideas in Theoretical CS (15-251)

August 2025-Present

Carneaie Mellon, 5000 Forbes Avenue, Pittsburgh, PA 15213

- Working 15 hours/week while also balancing CMU classes and extracurriculars
- Holding office hours and mentoring a 12 students to provide personalized academic support
- Co-teaching 2 recitation per week, helping prepare test review materials, and planning class events

## • Programming TA, National High School Game Academy

June 2025 - August 2025

- Carnegie Mellon Precollege and ETC, 700 Technology Dr, Pittsburgh, PA 15219
  Spent 3 weeks developing a 2-week curriculum on the basics of C# and Unity, and 6 weeks teaching students
- Taught a production workshop to 40 students and served as a liaison between team producers and NHSGA faculty
- Mentored 6 students and 2 6-person teams by checking in on them and providing academic and life advice
- Regularly interacted with all 80 students when debugging code and mediating team conflicts.

#### Personal Projects

 Pocketfish March 2024

UI designer and front-end developer | React.js, VS Code | MIT Blueprint Hackathon project

- Developed an AI-powered mobile app for evaluating the board state of physical chess games based on a photo
- Designed and implemented all UI elements using React.js and presented work to judges at the MIT hackathon

## Pizzapocalypse

Team Producer and visual artist | Unity, C#, Perforce, Github | 2023 CMU NHSGA Project

- Pitched and produced a mobile game with racing elements created in Unity and published on the IOS App Store
- Delegated tasks to a team of five, organized a three-week timeline, and animated game sprites and environments

## • Scopey: An Affordable Robotic Feeding Device For Mobility Restrictions

February 2023 - October 2023

Designer, engineer, and document author | OnShape | Assistive tech group project

- Engineered and built an assistive feeding device to pick up food and bring it to the user autonomously
- Researched competitors and collaborated in a team of eight along with a client with mobility restrictions

## Launchguide

March 2023 - April 2024

Full-stack developer | Android, Java, XML | 2024 Congressional App Challenge Winner

- Developed an ML-powered mobile app to notify visually impaired users of crosswalk signals at street intersections
- Led a group of three and worked in collaboration with Walkfit, a Worcester nonprofit for the visually impaired
- Congressionally recognized by Rep. Jim McGovern and selected to present at the US Capitol

## • Using a Mathematical Model to Personalize Keyboards for Users Missing Digits August 2022 - April 2023

Independent research project | Java | 2023 WRSEF Honorable Mention, MSEF Participant

- Independently analyzed typing trends and prior literature to code a mathematical model to theorize keyboard layouts to improve typing speed and comfort for users missing digits
- Presented at both the Worcester Regional and Massachusetts Science & Engineering Fair to a panel of judges

## SELECTED AWARDS

• Congressional App Challenge Certificate of Achievement and Congressional Recognition

April 2024

• Cyberpatriot XVI Platinum Tier 1st Place State Award

March 2024

• NCWIT Aspirations in Computing High School Regional Award Winner

February 2024

## EXTRACURRICULARS

• CMU Game Creation Society

• CMU School of Computer Science Day Planning Committee

August 2024 - Present August 2024 - Present