

# Nihan (Sofia) Yu

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## EDUCATION

### Carnegie Mellon University

Pittsburgh, PA

*Bachelor of Science in Information Systems; Minor in Artificial Intelligence and Computer Science*

*May 2027*

- Relevant Courses: Computer Systems, Database Design and Development, Data Structures & Algorithms, HCI, Probability, Linear Algebra, and Concepts of Mathematics.

## EXPERIENCES

### Carnegie Mellon University

Pittsburgh, PA

*Tartan Ambassador (Campus Tour Guide)*

*January 2025 - Present*

- Represent CMU by leading campus and virtual tours, engaging diverse audiences, and collaborating with teams to support special events and outreach efforts.

*Human-Computer Interactions Teaching Assistant (15-180)*

*August 2024 - Present*

- Support student learning in Human-Computer Interaction by grading assignments, providing detailed feedback, and facilitating understanding of complex concepts through consistent communication and guidance.

*Ad-blocking and Anti-blocking Software Researcher*

*March 2024 - December 2024*

- Maintained and enhanced browser and email extensions in a startup-like environment for Prof. Alessandro Acquisti.
- Developed a click detection script to track user interactions on websites for behavioral analysis.
- Designed a new algorithm using regex for checkout page and PII detections; refined JavaScript code for browser and email extensions to improve PII extraction and redaction, resolving long-standing issues.
- Enhanced the header bidding data collection script to optimize database size.
- Conducted rigorous testing and analysis of website merchant classification, data collection with DataGrip, and participant onboarding UX.

### Ethos Tenant Co.

Fairfax, VA

*Associate Intern*

*May 2023 - July 2023*

- Examined about 200 companies' rent rolls, compiling lease information into Excel spreadsheets for future outreach.
- Coordinated with over 40 prospective companies, initiating 5 successful deals.

### Robotics Club (Flint Hill School)

Oakton, VA

*Head of the Business Team and Head of the Software Team*

*Sep 2022 - June 2023*

- Raised the team's rank from 23rd to 8th in Virginia within a month after becoming the Head of the Software Team and re-designing the robot's TeleOp and Autonomous algorithm.
- Participated in FIRST Tech Challenge; coded the telemetry for our robot; created an engineering notebook and a portfolio, detailing robot design, strategic planning, budget breakdown, and financial analysis.

## PROJECTS

### C0 Virtual Machine (C)

*April 2024*

- Implemented a Virtual Machine in C0, a memory-safe subset of C language, similar to JVM operating as a stack.

### Google Dinosaur Game and Game AI (Python)

*Dec 2023*

- Developed a replica of the Google Dinosaur Game and an AI-driven player system in Python.

### Certamen Game Website (React)

*Sept 2022 - Jan 2023*

- Developed a cost-effective React website to host a quiz-bowl-style game for my high school's classics department, serving as a modern alternative to traditional \$600 physical buzzers.

### Linear Algebra Textbook (R, LaTeX)

*Jan 2023 - June 2023*

- Wrote a Linear Algebra Textbook with my high school's Linear Algebra teacher to be published.
- Developed R programming exercises, created labs and projects, and wrote textbook content in LaTeX.

## SKILLS AND ACTIVITIES

**Skills:** C; Python; Java; Processing; R; JavaScript; SQL; Ruby; React; HTML; Excel; LaTeX

**Activities:** Delta Delta Delta Sorority, Women in IS

**Languages:** Native Mandarin; Proficient English; Conversational French

**Awards:** Columbia Scholastic Press Association Gold Circle Award; Presidential Service Award Gold; French National Honor Society; Art National Honor Society; GYEC Second Prize (Team) and Best Team Player Award