Sara Pavlinek

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Education

Carnegie Mellon University, Bachelor of Science in Computer Science — Aug 2022 - May 2026

- HCI concentration, Game Design minor
- GPA: 3.6/4.0 (SCS Dean's List)

Relevant Courses: Introduction to Machine Learning, Design and Analysis of Algorithms, Great Ideas in Theoretical Computer Science, Designing Human-Centered Software, Introduction to Computer Systems, Parallel and Sequential Data Structures and Algorithms, Computer Graphics, Transformational Game Design Studio

Work Experience

App Development intern, Confetti — Jun 2025 - Aug 2025

- Developed key features for Mosh, a social music app, including a rewards system and in-app store which boosted user engagement and retention.
- Worked in a rapid iteration cycle, integrating user feedback from testing sessions into same-day design pivots, learning the full stack on the job and optimizing for real-time performance.

Research Assistant & Programming Intern, NoriLLA — Jun 2024 - Present

- Implemented an AR game that uses AI to provably improve children's learning of STEM concepts.
- Analyzed gameplay conversations using OpenAI's Whisper, uncovering that AI feedback led to increased dialogue and collaboration between children and with parents.

Teaching Assistant, Fundamentals of Programming (Python) — Jan 2024 - Dec 2024

- Mentored students from first-time coders to confident developers—one student credited the experience with landing an AI startup internship and switching their major to CS.

Computational Biology Summer Intern, Institute of Biotechnology CAS — Jul - Aug 2023

- Built pipelines for genome alignment, streamlining the processing of large-scale genomic datasets.
- Contributed to ongoing genomic research, proving ISL1 is required for the development and survival of spiral ganglion neurons.

Select Projects

Simulated Facial Expression Generation Project, CMU RASL — Sep 2023 - May 2024

- Implemented a Python-based face model using PyQt5 to simulate dynamic facial expressions on a personal fitness trainer robot.
- Supported research investigating how verbal and non-verbal robot feedback influences human performance.

VERVIT |Flutter, Android Studios — Mar - Nov 2021

- Developed an app that teaches seniors how to navigate technology during Covid19 isolation.
- Designed intuitive interfaces and accessibility-first features—such as large tap targets, high-contrast themes, and clear onboarding—driven by real-world user testing with elderly users

'Grow' |HTML, CSS, JavaScript — HackCMU 2022

- Won Meta's Sponsor Challenge for creating the best hack that helps users connect, explore, and unlock opportunities in the metaverse by developing an interactive virtual plant-growing experience.

Game Design Projects

Sudoku — Nov - Dec 2022

- Developed a custom Sudoku game engine inspired by NYT Sudoku, featuring intelligent hint generation powered by a backtracking algorithm.

Flytrap Adventures — Jan - May 2023

- Collaborated as a level designer and programmer on a team project, crafting dynamic greenhouse environments that evolve with player interaction.

Languages and Programs

- **Programming Languages:** Python, C, Swift, C++, SML, Processing, JavaScript, HTML, R, Flutter
- **Software/Tools:** XCode, Firebase, Android Studio, Unity, Figma, LaTeX