

Sara Pavlinek

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Professional Summary

Experienced computer science senior with a human-computer interaction concentration and game design minor, strong research and programming skills, and a creative problem-solving approach.

Education

Carnegie Mellon University, Bachelor of Science in Computer Science, HCI concentration, Game Design minor
Aug 2022 - May 2026

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

Nový PORG High School, International Baccalaureate Diploma (Score: 43/45, Top 4%) May 2022

Work Experience

App Development intern, Confetti Jun 2025 - Aug 2025

- Built core features for the app Mosh using Swift, Firebase, and Google Cloud.
- Collaborated with the founding team to prototype new features, run user tests, and integrate feedback into rapid product iterations.

Research Assistant & Programming Intern, NoriLLA Jun 2024 - Present

- Analyzed conversational data using OpenAI's Whisper to extract insights about AI-assisted learning.
- Developed an augmented reality balancing game utilizing computer vision.

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

- Led recitations for 30 students and hosted office hours, small-group review sessions, and individual tutoring.
- Assisted in creating teaching materials and grading assignments.

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

- Performed large data analysis using R and developed Linux pipelines for genome alignment and peak calling.

Select Projects

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

- Designed and implemented a Python-based face model using PyQt5 for dynamic facial expression transitions.
- Integrated the model into a personal trainer robot for real-time interactions.

VERVIT |Flutter, Android Studios Mar - Nov 2021

- Led the graphic design and app development efforts and published an app aiding seniors in using technology.

'Grow' |HTML, CSS, JavaScript HackCMU 2022

- Won Meta Challenge by creating a virtual plant-growing experience that encouraged real-life plant care.

'Vesmir' |HTML, JavaScript HackCMU 2023

- Built a space-themed website integrating Spotify API to generate personalized music playlists, creating a unique "music universe" for each user.

Game Design Projects

Sudoku Nov - Dec 2022

- Developed a custom Sudoku game framework in Python with hint generation using a backtracking algorithm.

Flytrap Adventures Jan - May 2023

- Created a 2D platformer where players navigate a flytrap through a dynamic greenhouse environment.

Languages and Programs

Programming Languages: Python, C, Swift, C++, SML, Processing, JavaScript, HTML, R, Flutter

Software/Tools: XCode, Android Studio, Unity, Figma, Latex