

EDUCATION

Carnegie Mellon University <i>Bachelor's of Science, School of Computer Science, GPA: 4.00/4</i> <ul style="list-style-type: none">◦ Courses: Imperative Computation, Discrete Math, Linear Algebra, and Linguistics	Pittsburgh, PA May 2029
Fox Chapel Area High School <i>High School Diploma, GPA: 4.58/4</i> <ul style="list-style-type: none">◦ Courses: Data Structures & Algorithms, Linear Algebra, AP CS A, AP Calc BC, AP Physics C, AP Bio, AP Chem	Pittsburgh, PA June 2025
Pennsylvania Governor's School for the Sciences <i>Summer Program, Hosted at CMU</i> <ul style="list-style-type: none">◦ Culminating research project involved optimizing computational gameplay strategies in BlokusDuo using Minimax, MCTS (w/ CNNs), Reinforcement Learning, and Proximal Policy Optimization	Pittsburgh, PA June – July 2024

WORK EXPERIENCE

Teaching Assistant: Principles of Imperative Computation (15-122) <i>Carnegie Mellon University School of Computer Science</i> <ul style="list-style-type: none">◦ Lead weekly recitations and labs for 25+ students, teaching fundamental concepts in C and C0, including memory management, pointer arithmetic, data structures, and contract-based programming.◦ Facilitate one-on-one office hours to debug complex logic and ensure student mastery.◦ Collaborate with a large course staff to grade assignments and exams, ensuring consistent evaluation of code correctness for a high-enrollment course.	Pittsburgh, PA Jan 2026 – Present
ScottyLabs: Technology <i>Terrier Full-Stack Developer</i> <ul style="list-style-type: none">◦ Ideate an agnostic, self-hosted hackathon management platform for the largest hackathon in Pittsburgh and for other colleges◦ Design and optimize a novel backend architecture supporting expo (HackMIT style), rubric, and other judging styles in Rust◦ Implement styled pages, interfacing with the backend for participants, judges, and managers with SvelteKit and TailwindCSS	Pittsburgh, PA Sep 2025 – Present

RESEARCH EXPERIENCE

Hukriede Lab @ University of Pittsburgh Integrated Systems Biology <i>Summer Student Researcher</i> <ul style="list-style-type: none">◦ Completed extensive computational analysis of fluorescent microscopy images◦ Developed a workflow to analyze stain localization on nephron tubules using computer vision◦ Understood tissue structures of the kidneys and staining to work on data collection for a research publication	Remote Jun 2023 – Aug 2023
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PROJECTS

- **AniMatch:** Developed a mobile-responsive "Tinder-style" web application using React and Tailwind CSS that leverages the AniList API to provide personalized anime and manga recommendations via a swipe-based interface.
- **SongSorter & Exploring and Applying Audio-Based Sentiment Analysis in Music.:** Trained models to determine the emotion of a song on Russel's circumplex model of affect with PyTorch and created a Java application to interface and visualize the data extracted from Spotify clips
- **Automation of the Morphological Analysis of Stem Cells & Hukriede Lab:** Scripts used to analyze fluorescent microscopy imaging to quantify cell count, shape, regularity, and stain intensity then collect data to make manual inferences.

PUBLICATIONS

- **Jhanji, E.** Exploring and applying audio-based sentiment analysis in music (2024). *arXiv:2403.17379 [cs.SD]*. doi.org/10.48550/arXiv.2403.17379.
- Maggiore JC, Przepiorski A, Han H, **Jhanji E**, Streeter EC, McDaniels M, Hukriede NA. Loss of Histone Deacetylase 8 Enhances Proximal Tubule Acute Kidney Injury Repair. (2023). Manuscript in preparation.
- Bressler A, Brown A, Frischmann J, Huang M, **Jhanji E**, Liu S. Blokus Duo: Using Deep Search Algorithms to Explore Turn-Based Game Strategy. (2024). bit.ly/pgssjournal.

SKILLS

Languages/Frameworks: Python, Java, HTML/CSS/JS, Typescript, React, Svelte, TailwindCSS, Vite, Rust, C, R, \LaTeX
Technologies: Linux/Unix, PyTorch, Docker, Git, NeoVim, Microsoft Office, Adobe Illustrator, Adobe InDesign

HONORS & AWARDS

- **Rotary Club Honoree:** Selected by the math department and recognized by the Fox Chapel Rotary Club.
- **Coding State Champion:** PA Technology Student Association coding event involved a theory test and timed challenges.
- **First Award:** Awarded at the regional and state level by the PA Junior Academy of Science in 2021, 2023, 2024, 2025