Justin Liang

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https://github.com/jliang2204
https://jliang2204.github.io/EPortfolio/

Available Immediately

Education

UNIVERSITY OF PITTSBURGH (B.S. Computer Science) | Pittsburgh, PA   Aug 2022 - May 2026
Projects
- Classifying AlphaZero King Positioning
  - Using ML methods in Python
  - Using SKLearn to analyze AlphaZero's games with Logistic Regression, Random Forest Classifier, and SVM
- Battleship in Browser
  - Frontend project using React/JSX
- Fullstack Catering Management App
  - Using TSX/react for frontend and Rust/SeaORM for backend

CRANBROOK HIGH SCHOOL | Bloomfield Hills, MI   Sep 2018 - May 2022

Experience

Undergraduate Research Assistant   April 2025 – Current
University of Pittsburgh
- Recreating vignettes in 3D Unity as a virtual museum of historically significant photos
- Using ML models to tag objects in these photos as identifiers as well as allowing photos to be grouped
- Interacting with ChatGPT API to create alt-text for the photos with emphasis on prompt-engineering for concise and consistent alt-text that does not contradict the descriptions
- Handling large number of photos (~60,000) and working around rate-limits and using batching to process the photos

Game Development   May 2024 - Aug 2024
Projects
- Developed a "Jump King"-style game in *Unity* with unique features using C#.
- Built a functional chess board with C#.
- Designed and implemented a responsive platformer player controller in C#, incorporating mechanics like variable jump height, coyote time, and jump buffering for smooth and precise user control.

Software Development Intern   May 2022 - Jun 2022
Wayne State University Car Lab
- Developed applications in Python and utilized TurtleBot for robotic control.
- Gained hands-on experience with ROS (Robot Operating System) and Docker.

Skills

PROGRAMMING LANGUAGES	Python, Java, C#, JavaScript, TypeScript, Rust
WEB DEVELOPMENT	HTML, CSS, React, Node.js
BACKEND & DATABASES	SQL, MongoDB, Rest APIs, Flask
SOFTWARE & CLOUD	VSCode, ROS, Unity, MATLAB, GitHub, AWS, Docker

Other Accomplishments

USCF Chess National Master; Ranked #10 in Michigan