PARISHI JAIN

EDUCATION

Carnegie Mellon University

Bachelor of Science in Information Systems — Minor Software Engineering

Pittsburgh, PA

Expected Graduation: May 2028

• Relevant Coursework: Database Design and Development, Data Structures, Fundamentals of Programming & CS, Designing Human Centered Software, Probability Theory, Discrete Mathematics, Business Strategy Fundamentals, Information Systems Milieux, Statistics

TECHNICAL SKILLS

Languages: Python, Java, C, JavaScript, HTML/CSS, SQL

Libraries/Tools: XCode, TensorFlow, Keras, OpenCV, Git, MySQL, Postman, Pandas, Scikit-learn, VS Code, GitHub

EXPERIENCE

Carnegie Mellon University, School of Computer Science, Variability Lab

April 2025 – Present

Research Assistant, GRACE Project

Pittsburgh, PA

- Prototyping accessible systems to support blind and low-vision UI/UX designers in collaborating with developers, focusing on screen-reader compatibility and adaptive interface elements with Professor Andrew Begel.
- Conducted 27 user studies and collected multi-modal data to write a research paper focused on gaze and gesture-based AI systems to improve real-time screen interactions for BLV users.
- Coded and categorized 90+ hours of user data into structured spreadsheets, conducting detailed qualitative analysis; developed a new coding template that reduced processing time by 50%, significantly improving research efficiency.

NeuralSeek June 2025 – August 2025

Agentic AI Builder Intern, Accessibility Evaluation Agent

Remote

- Built a multi-agent system that automatically audits code, design docs, and screenshots, identifying high/medium/low accessibility issues per WCAG 2.1, ADA, AODA, and Section 508 standards that normally require hours of review.
- Designed modular agents with OCR, routing logic, and configurable prompts, using Virtual KBs and Guardrails to manage knowledge, enforce thresholds, and support human-in-the-loop workflows.

PROJECTS

King's Closet: Fashion Outfit Evaluation Tool | Source Code

Python | KMeans | OpenCV | Scikit-Learn

- Programmed a virtual try-on system that let players swipe through closet items, view them on their body in real time using MediaPipe hand tracking and OpenCV for visualization, and expand their wardrobe through an in-game shop.
- Built a fashion grading engine that applies KMeans clustering to extract dominant clothing colors from image pixels of the top and bottom, converts them to RGB, and applied custom harmony rules; developed both the backend grading logic and the interactive game UI.
- Utilized dictionaries and arrays to efficiently store and compare extracted color clusters across user outfits.

Stellar Sprint: Spaceship Competitive Dodging Game \mid Source Code

Python | MediaPipe

- Built a horizontal-scrolling game in Python where players navigate a spaceship through obstacle fields using either keyboard or gesture-based controls with single-player, multiplayer, and a versus-computer mode.
- Engineered object-oriented game logic to manage scoring, collisions, and progressive levels with increasing difficulty, speed and obstacle complexity.
- Applied path prediction logic to computer-controlled opponents to dynamically adapt their flight path based on obstacle patterns and player progress for versus-computer mode.

Duquesne Incline Website Redesign | Source Code

HTML | CSS | JavaScript | jQuery

- Redesigned and developed a mobile-first, cross-browser compatible website for Pittsburgh's Duquesne Incline with features like Google Maps API integration, form validation API, and a dynamic image carousel.
- Iteratively improved the site through usability testing, implementing enhancements such as clearer navigation, sidebar
 consistency, and optimized content structure.

LEADERSHIP

Founder, Code4Change

Jun 2023 - Present

- Designed weekly Python programming workshops for elementary students, covering loops, conditionals, and game logic.
- Coordinated with local nonprofit to host hands-on CS education sessions for underserved communities.