Ian Mei

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EDUCATION

University of Massachusetts Amherst

Amherst, MA

Bachelor of Science in Computer Science; GPA: 3.96/4.00

Expected Graduation: May 2027

Relevant Coursework: Object Oriented Design, Linear Algebra, Theory of Computation, Multi-Variable Calculus, Programming in C, Data Structures, Intro to Algorithms*, Programming Methodology*, Reasoning Under Uncertainty*

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, C, C++, HTML, CSS, Dart

Technologies: Git, VS Code, LaTeX, Keras, Arduino, Flutter, Android Studio, Flask

Projects

Data Structures and Algorithms Visualizer | Javascript

June 2024 - Present

- Developed an interactive tool to visualize and animate data structures (arrays, linked lists, trees, graphs) and algorithms (Bubble Sort, Merge Sort, Quick Sort, Dijkstra's, A*, BFS/DFS) using HTML, CSS, and JavaScript.
- Designed a user-friendly interface with controls for starting, pausing, and resetting visualizations, ensuring an intuitive experience.

Handwritten Digit Recognizer | Python, Javascript

May 2024

• Developed a neural network model to categorize handwritten digits with a 99.4% accuracy, and constructed a front end that takes a user's drawing, and normalizes the image into the model, displaying the predicted value.

UMass Dining Wrapped | Python, HTML/CSS, JavaScript

November 2023 - April 2024

- Developed a personalized dining history application, offering users insights akin to Spotify Wrapped.
- Extracted user data with over 1000 entries from the GET Mobile page using user credentials, then cleaned and reformatted for enhanced readability and usability.
- Provided users with detailed statistics on their UMass dining habits, including metrics like the number of breakfasts consumed at specific dining halls and expenditure at various campus vendors.
- Designed an algorithm enabling users to have personalized titles, based on their dining habits.
- Created a full-fledged front-end, which allowed over 100 users to view their information with full animations and graphics.

LockIn | Python, Keras, Arduino

November 2023

- Pioneered the development of an application leveraging computer vision to track user attention in real-time.
- Implemented a sophisticated computer vision system using OpenCV and Keras to accurately detect and analyze facial features, specifically focusing on the user's eyes.
- Devised an integrated alarm and notification system to alert users when their attention waned, ensuring timely re-engagement with the screen.
- Constructed a responsive water gun system triggered when the user's attention was diverted, combining software and hardware for an immersive experience.

EXPERIENCE

Jones Beach Lifeguard Corps

Long Island, NY

Beach Lifeguard

June 2024 - Present

- Ensured swimmer safety, monitored beach, performed rescues, and administered first aid and CPR as needed.
- Maintained compliance with beach rules, conducted safety inspections and provided excellent customer service to beachgoers.
- Participated in regular training, physical conditioning, and safety demonstrations to be prepared for emergencies.

Taiwanese and Chinese Students' Association

Amherst, MA

Event Coordinator

September 2023 - Present

- Spearheaded planning and execution of numerous high-impact events, demonstrating strong organizational skills.
- Exemplified adept event management skills by organizing flawless events, skillfully navigating logistics for over 500 participants, and delivering a memorable experience marked by seamless coordination and attendee satisfaction.
- Strengthened partnerships with the general body and other cultural organizations through effective communication, enhancing collaboration and engagement.