Bowen Yi

858-776-0900 | bowenyi@umich.edu | Linkedin | Github

EDUCATION

The University of Michigan, Ann Arbor, MI   Expected Dec. 2024
Bachelor of Science in Computer Science
- GPA: 3.77, with University Honors
- Related Coursework: Data Structures and Algorithms (Completed), Intro to Machine Learning (Current), Human-Centered Software (Current), Intro to Computer Organization (Current)

SKILLS

- Proficiency in C++, Python, C, Java
- Intermediates/Basics in PyTorch, Scikit-Learn, Assembly, Git, JavaScript, R, MATLAB, SQL, Azure
- Coursera Certifications: Machine learning specialization

EXPERIENCE

Boardx.us, Grand Rapids, MI   Jun. 2023 - Aug. 2023
Software Engineer Intern
- Managed company files on Microsoft Azure
- Reviewed, unit tested, and analyzed code efficiency daily
- Created and published release notes when a new app version became available

University of California - San Diego, La Jolla, CA   Oct. 2022 - Nov. 2022
Research Assistant, SEISUP Lab at Computer Science Department
- Co-developed a program to extract tweets of California senators using Python, the Beautiful Soup library, and the Tweepy library
- Researched R language to visualize data and analyze the political landscape in California

PROJECTS

Piazza Posts Classifier | *Supervised Learning, C++*
- Trained a Bernoulli native Bayes Classifier on 10000+ Piazza posts and predicted topics of input posts, with 91% accuracy
- Provided a custom implementation of the underlying tree-based map data structure

Image Carving Program | *Computer Vision, C++, C*
- Implemented a content-aware seam carving algorithm to resize PPM images without distortion
- Managed dynamic memory and matrices, accomplishing a resizing accuracy rate of 98.7%

Stock Market Emulator | *State Machine Design, C++*
- Emulated a priority queue-based stock market capable of generating and processing over 1 million orders
- Designed a finite-state machine to emulate over half a million transactions
- Developed custom data structures such as pairing heap to compare profits and output the best time to buy stocks, with 100% accuracy

Office Hour Queue Web Backend | *JSON, C++*
- Built a web backend for a class office hours queue using doubly linked list data structure
- (De)serialized 5000+ user requests and responses and conducted extensive unit testing by JSON objects

LEADERSHIP & COMMUNITY INVOLVEMENT

Professional Events Leader, ACM @ UC San Diego   Sep. 2022 - Dec. 2022
- Initiated 5+ resume-editing and networking events with 200+ attendees for UCSD's ACM chapter

Volunteer College Application Tutor, Self-Employed   Nov. 2021 - Present
- Guided 10+ domestic and international high school students from underprivileged backgrounds on the college application process and brainstormed 50+ college essays