Zhiyang Zuo

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EDUCATION

University of Massachusetts Amherst

Amherst, MA

Candidate for Bachelor of Science in Computer Science, Minor in Mathematics

Expected Graduation: May 2024

Bunker Hill Community College – Dual Enrollment

Boston, MA

PERSONAL PROJECTS

Personal Website (https://zzuo123.github.io/)

January 2021 – Ongoing Project

- Programmed using JavaScript, HTML, SASS to showcase personal projects and experiences
- Utilized JavaScript libraries such as swiper is to deliver a smooth user experience
- Improved my UI design skill by learning and using the Figma software to design the website

Daily App (https://daily-app-twd.herokuapp.com/home)

December 2020 - January 2021

- Created a Python Flask web app and deployed it on Heroku to help users keep diaries and track weather and time
- Utilized Open Weather Map API and python request module to retrieve accurate weather data based on zip code
- Designed and implemented a data model to store and query user data efficiently on a remote PostgreSQL database
- Implemented email-based authentication and password hashing and salting to ensure user account security
- Utilized the Bootstrap framework and CSS media queries to make the website interactive and mobile responsive

EXPERIENCE

Manning College of Information and Computer Sciences

Amherst, MA

Undergraduate Course Assistant, CS377 Operating Systems

September 2022 – Present

- Hosted semiweekly office hours where I answered students' questions about the course materials and assignments.
- Assisted in hybrid teaching by relaying zoom chat to professor during semi-weekly lectures and answering questions online.
- Collaborated 8 other UCAs to grade 150+ students' assignments and labs within 1 week from the deadline.

Stoke Therapeutics

Bedford, MA

Bioinformatics Summer Intern, Platform Discovery Department

June 2022 – August 2022

- Collaborated with a team of scientists to implement an RNA-Seq QC pipeline using AWS, Docker, and Snakemake to automate the processing of large High-Thruput RNA sequencing data and generating of dynamic visual reports.
- Performed tests to assess the efficiency of popular RNA-Seq QC tools and developed a python script to automatically configure AWS cloud computing resources for the pipeline based on input size to minimize cost and maximize efficiency.
- Participated in weekly team meetings to report project progress, discuss solutions to roadblocks, and receive feedbacks.

Biogen

Cambridge, MA

Summer Intern, Technical Product Complaint Department

June 2021 - August 2021

- Designed and implemented a product defect knowledge wiki on Confluence with a global team of subject matter experts that improved team efficiency by 15% and enabled the department to retain key knowledge essential for team functioning.
- Created Python program to extract common wordings from past 10k+ customer complaints for new-hire training.
- Automated an excel index match process using Python and the Pandas library to standardize data processing and reduced time required to generate the monthly report by 1 hour.

Malden YMCA

Malden, MA

Zero-Robotics Program Instructor

June 2019 - July 2019

- Co-taught programming and physics to 30+ elementary school students to prepare them for the Zero Robotics state competition in which they placed 2nd and 3rd
- Oversaw 2 hands-on projects and 1 field trip to ensure student safety

ACTIVITIES

Advent of Code (Global Annual Coding Challenge)

Online Event

- Participated virtually in daily coding challenges to improve competitive programming skills
- December 2020

Ranked top 15% in the UMass Amherst student leaderboard

SKILLS

Programming language: Python (advanced), Java (advanced), C (intermediate), JavaScript (intermediate), SQL (intermediate) Frameworks: Node.js, PostgreSQL, Flask, Bootstrap, BeautifulSoup, REST API

Technology: Version Control (Git & GitHub), Unit Testing, Heroku, Bash Scripting, Figma, Raspberry Pi, Confluence

Language: English (proficient), Mandarin (native), Cantonese (native) Spanish (intermediate)