YUMENG "MONA" ZHAO

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EDUCATION

UNIVERSITY OF CALIFORNIA-SANTA CRUZ, Santa Cruz, CA — Expected Graduation: Dec 2023
Bachelor of Science in Computer Science — GPA: 3.67/4.00
Coursework: Data Structures and Algorithms, Object-Oriented Programming, Web Applications, Database Systems, Software Engineer, Operating Systems, Computer Networks, Data Visualization and Statistical Programming

TECHNICAL SKILLS

Programming: C/C++, Java, JavaScript, Python, HTML/CSS, SQL, R
Frameworks/Libraries: React.js, Tailwind CSS, Bootstrap, Flask, Waitress
Tools: Firebase, MongoDB, Git, Github, Visual Studio Code, Adobe Photoshop

PROJECTS

EDUTRADE — August 2023
Github: https://github.com/Jeffuz/EduTrade
React.js | Tailwind CSS | Firebase
- Led full-stack development, creating a responsive social media discussion forum with seamless user interactions, content sharing, and engaging discussions.
- Implemented Firebase for back-end data storage and retrieval, optimizing data queries and real-time updates, and integrating user authentication to enable secure and personalized experiences.

LOOKOUT DESKTOP — May 2023 - July 2023
Bootstrap | Flask | Waitress | SQLite
- Designed and implemented a geospatial mapping and camera control application using OpenLayers, enabling real-time data visualization, dynamic layer rendering for camera views, and alert zones, leading to a significant enhancement in wildfire monitoring efficiency and situational awareness.
- Contributed expertise in geospatial calculations and user interaction design, resulting in a versatile tool for security and surveillance applications.

PUBLICATIONS

Co-authored "RipViz: Finding Rip Currents by Learning Pathline Behavior" in IEEE Transactions on Visualization and Computer Graphics

WORK EXPERIENCE

UCSC ADVANCED VISUALIZATION AND INTERACTIVE SYSTEMS LAB, Santa Cruz, CA — Jan 2022 – Present
Research Intern
- Collaborated effectively on image classification research, enhancing algorithms through experiments and contributing to research paper development in computer vision and machine learning.
- Leveraged cross-platform and cloud-based tools for seamless communication and information sharing within the team, showcasing strong teamwork and communication skills.

ROBOTICS CATS | CITRIS WORKFORCE INNOVATION, San Jose, CA — May 2023 - July 2023
Software Developer Intern
- Researched and compared various mapping systems, integrating insights from customer interviews, and conducted in-depth analyses of wildfire risk and market dynamics, documented findings into articles.
- Played a key role in full-stack software development, focusing on API server construction, advanced data visualization, and mathematical algorithm design for geographic information.

UCSC COMPUTER AND ENGINEER, Santa Cruz, CA — Sep 2021 - Dec 2021 | Sep 2022 – Dec 2022
Tutor/ Reader
- Collaborated with team members to design Python programming assignments, mentored students on their projects, and provided constructive feedback with a strong emphasis on program design and coding style..
- Facilitated weekly office hours, providing instructions and guidance on C programming, and explaining the logic of algorithms and the usage of libraries in homework assignments.