YIZHEN LIU

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EDUCATION

University of California, Irvine — Jun. 2021
B.S., Computer Science
GPA: 3.77/4.00 | Dean's Award List (8 Quarters)

SKILLS

Programming	Python, C/C++, Java, HTML, CSS, JavaScript, SQL, TypeScript, Common Lisp, MIPS Assembly, Prolog
Utilities	Git, Vim, Linux/Unix, MySQL, React.js, Angular, JUnit, Node.js, Express.js, MongoDB
Languages	Mandarin, Cantonese

PROJECTS

ArdentChat - https://github.com/imliuyzh/ArdentChat
A real-time messaging application for one-on-one communication between 50 students and staff members.
- Implemented the front-end with React.js which allowed users to send text messages in any length and receive media files such as JPEG, MP4, and PDF
- Built a RESTful API with Node.js and Express.js that returned user information stored by the Atlas MongoDB service
- Maintained the program with Git while adding new features and scaling resource usages

ICS Search Engine - https://github.com/imliuyzh/ICS-Search-Engine
A search engine written in Python that was able to handle thousands of webpages under a subset of the ICS domain with the query response time below 300ms.
- Ranked the relevance among seven thousand pages in low response time by coding custom cosine similarity algorithm with tf-idf weighting
- Parsed the text within webpages to store them into an inverted index distributed among various small index files
- Constructed the search engine with 3 students in 4 weeks

RELATED EXPERIENCE

Software Development Intern — Jul. 2020 – Sep. 2020
Ardent Academy for Gifted Youth
- Developed a whiteboard application with HTML, CSS, and JavaScript in response for drafting needs among students who enrolled in the math program
- Renovated the front-end of Ardent Labs' website with in-demand industrial web development tools such as React.js and NPM
- Produced a prototype for an internal messaging application with the MERN stack for individual conversation between students and teaching staff members

ICSSC Project Committee Developer — Oct. 2019 – Jul. 2020
University of California, Irvine
- Collaborated with over 10 developers to create a website enabling students to view information for over 5000 classes and their grade distribution since Fall 2014
- Reported current status for the assigned team to the head of the project committee during weekly meetings
- Organized several activities enabling students to learn essential development tools like Git

Student Lab Tutor — Mar. 2019 – Jun. 2020
University of California, Irvine
- Engaged with more than 100 students on their class assignments through debugging and explaining the control flow of their programs
- Clarified students' confusion on difficult concepts under 5 minutes on average