

Sifeng Chen

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EDUCATION

University of Rochester

B.S. in Computer Science

Rochester, NY

Expected May 2024

- GPA: 3.5
- Dean's List
- Courses: Web Development, iOS Development, Human-Computer Interaction, Data Structures, Design & Analysis of Efficient Algorithms, Programming Language Design and Implementation, Linear Algebra, Discrete Math, Calc

EXPERIENCE

Rochester Human-Computer Interaction Lab

March 2023 - Present

Software Engineer

Rochester, NY

- Developed a mock social media web app using MeteorJS and various features, ensuring user-friendly interface and seamless functionality.
- Designed database schemas and leveraged MongoDB Atlas to store participant response and actions across 20 experiment batches over the semester, averaging 30 participants per batch.
- Optimized the application's scalability and performance, by implementing the debouncing technique reducing CPU usage by 85% and runtime by 90% overall.
- Restructured and documented backend codebase for scalability, code reusability and readability by modularizing key functions.
- Established comprehensive unit tests to cover various real life scenarios. Utilizing testing framework Puppeteer and minimized experiment costs and reduced crash rate from 80% to 0%.

ReviCID

May 2023 - Present

Software Engineer

New York, NY

- Spearheaded front-end development for the company's website and primary software during the early stages.
- Enhanced user experience by implementing API services such as AWS S3, CloudFront, Auth0, and Stripe.
- Adopted the Bulletproof React software architecture for a scalable and production-ready NextJS application.
- Established the team workflow using agile methodology for consistent feature delivery and enhancing collaboration between frontend and backend team.

RocLab | Campus Software Consultancy

Feb 2023 – June 2023

Front-end Developer

Rochester, NY

- Incorporated interactive functionalities to facilitate client-side interactions with backend API endpoints.
- Developed static pages using React and Chakra UI for the web app, ensuring it's responsive and mobile-friendly.
- Collaborated with UI/UX team for client-side designs, and with backend engineers for app architecture design.

Department of Computer Science: University of Rochester

Dec 2022 – May 2023

Teaching Assistant

Rochester, NY

- Conducted weekly office hours to support students in overcoming challenges, resulting in a course average of A-.
- Organized and assigned 100 students to 4 TAs, improving the course's grading system and preventing conflicts.

PROJECTS

UtoCommunityEvents Hub | *React, Python-Flask, SQLAlchemy, Tailwind CSS, npm*

- Built a scalable server-side architecture using RESTful API to handle large amounts of data and user traffic.
- Enabled user and events registration & login with secure information storage using Flask-SQLAlchemy database.
- Developed and tested various API endpoints for the functionality of user authentication and authorization.
- Improved user experience by developing a client for the web application using Front-end framework, ReactJS.

Reversi With AI Opponent | *Java*

- Developed the data structures with Object-Oriented Design to represent the formal model for the game of Reversi.
- Designed adaptable adversarial state-space search framework for two-player, perfect knowledge, zero-sum games.
- Built a computer opponent that makes optimal moves against players using Minimax decision rule algorithm.
- Improved the computation time by implementing the Heuristic Minimax algorithm with Alpha-Beta pruning.

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, C, Ada, OCaml, SQL, Swift, HTML/CSS.

Frameworks: React, NextJS, Meteor.js, Express.js, Flask, TailwindCSS, Chakra UI.

Developer Tools: GitHub, Git, npm, yarn, Figma, Framer, Framer Motion.

Cloud Services: MongoDB, AWS, Vercel, Meteor Cloud.