Roy Sun

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EDUCATION

University of Wisconsin - Madison

Madison, WI M.S. Computer Science Expected May 2022

GPA: 4.00/4.00

Rice University Houston, TX B.S. Mechanical Engineering Graduated May 2018

GPA: 3.74/4.00

Epic Systems

WORK EXPERIENCE

Technical Solutions Engineer

Verona, WI

July 2018 - June 2020

- Led weekly calls with large-scale healthcare organizations to troubleshoot technical issues and optimize existing functionalities; reduced support ticket volume by 60% through introducing best practices on issue documentation, communication, and responsiveness
- Collaborated with developers to find and fix software bugs, tested fixes using internal RESTful API and unit testing tools
- Successfully managed hundred-thousand-dollar Epic installation projects, tracked progress and prioritized tasks to ensure milestones are met
- Developed and enhanced backend software for medication label suite; used by hundreds of hospitals around the world
- Created and spearheaded team-wide process for documenting internal code and programs, reducing duplicate work and improving team-wide efficiency; developed table creation tool using JavaScript for ease of updating documentation

Mechanical Intern

BNSF Railway

Vancouver, WA

June 2017 - July 2017

- Developed Python program to automate the task of updating excel sheets with train arrival, depart times, and worker shift schedules; reduced manual parsing and documentation time by 95%
- Improved material storage management by creating a documentation system to organize and facilitate the mobile checkout process; decreased erroneous checkout and misplacement from 30% to under 5%

Engineering Student Researcher Rice University Dean's Office of Engineering Houston, TX

August 2016 - May 2018

- Analyzed data regarding under-represented minorities in engineering faculty and graduate students across the nation; evaluated plans by schools to increase minority population; used Excel and Linux to run regression analysis on data and highlight trends over the last five years
- Co-authored "Evaluating the Quality of Project Summaries for S-STEM Proposals", evaluated the strengths/weaknesses of engineering grant proposals
- Assessed the teaching quality of Rice's engineering departments through statistics and satisfaction surveys, highlighted areas for improvement

Computer Science Teaching Assistant

Rice University

August 2015 - January 2017, January 2018 - May 2018

- Hosted bi-weekly review sessions where students worked on interactive group assignments to reinforce concepts; hosted weekly office hours to assist with homework and cloud projects; graded weekly MATLAB assignments (CAAM 210, MATLAB course)
- Hosted weekly office hours to assist with homework; answered questions on Piazza regarding Python and math concepts; met one-on-one with struggling students to bring them up to speed; graded bi-weekly Python projects (COMP 140, Python course)

PROJECTS

Portfolio Website Portfolio Link

Used HTML, CSS, JavaScript, JQuery and the Bootstrap framework to create a modern portfolio website which showcases personal projects and skills.

Mafia Tracker

Used React, JSX and the Material UI library to create a sleek-looking results tracker for the popular social deduction game Mafia (aka Werewolf). The application facilitates gameplay by assigning roles and storing entered notes from game events. Users can save individual game results including winning team, list of players/roles and documented game events. In progress.

ExpenseBuddy ExpenseBuddy Link

Used React and Redux to create an expense tracking application. Allows users to create, modify, remove, search, and organize expense information. Uses Google API for login authentication and is connected to Firebase for persistent data.

Riconnect Riconnect Link

Used HTML, CSS, JavaScript, MongoDB, Express, and Node to create an events page for the eleven Rice University dorms. Back end stores accounts and posted information. Allows users to view and post events for all eleven residential colleges in one convenient location.

Visit Houston Visit Houston Link

Used HTML and CSS to create a modern home page advertising the city of Houston to potential tourists.

TECHNICAL COMPETENCIES

Languages: Python, Java, JavaScript, HTML/CSS, SQL, M

Technologies: React, JSX, Bootstrap, JQuery, MongoDB, Express, Node, Firebase

Others: RESTful API, Git, Unix, Relational Databases, Object-Oriented Programming, Data Structures, Algorithms, Front-end Software Design