

Roy Sun

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EDUCATION

University of Wisconsin - Madison

M.S. Computer Science

GPA: 4.00/4.00

Madison, WI

Expected May 2022

Rice University

B.S. Mechanical Engineering

GPA: 3.74/4.00

Houston, TX

Graduated May 2018

WORK EXPERIENCE

Technical Solutions Engineer

Epic Systems

Verona, WI

July 2018 – June 2020

- Led weekly calls with large-scale healthcare organizations to troubleshoot technical issues and optimize existing functionalities
- Managed multiple Epic and third-party installation projects, tracked progress and prioritized tasks to ensure milestones are met
- Investigated codebase and troubleshooted production environments with Unix to find bugs, collaborated with software developers to fix bugs
- Developed backend features medication label suite while adhering to object-oriented programming principles and optimizing performance
- Created reporting programs for collecting inpatient data and workflow performance metrics through internal REST API
- Created and spearheaded team-wide initiative to have a set process for documenting internal code and programs written by other TS

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
- Improved material storage management by creating a documentation system to organize and facilitate the mobile checkout process

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

Houston, TX

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)

Procurement Team

Engineers Without Borders

Houston, TX

August 2014 – May 2016

- Oversaw budget allocations and procured materials for the construction of the sustainable water pump project in Saldrach Zeledon
- Led Health and Sustainability team to evaluate project satisfaction in Nicaragua and team participation within the Rice EWB chapter

PROJECTS

Portfolio Website

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

<https://thisisroy.github.io/>

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. Project is in progress on Github.

ExpenseBuddy

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

<https://react-expense-program.herokuapp.com>

Riconnect

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.

<https://murmuring-sierra-51643.herokuapp.com/>

Visit Houston

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

<https://visit-houston.surge.sh/>

TECHNICAL COMPETENCIES

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

Frameworks: React, JQuery, MongoDB, Express, Node, Firebase