Zirui Li

908-210-1457 | rickyli6937@gmail.com | https://www.linkedin.com/in/ricky-li-ab1228170/

Education

University of Maryland College Park, Maryland
Bachelor of Science *in Computer Science, Minor in Math* *Aug. 2021 – December 2024 (Expected)*

GPA: 3.97/4.00

Relevant Courses: Introduction to Computer Systems, Discrete Structures, Object-Oriented Programming 2, Algorithms, Organization of Programming Languages, Web Application Development with JavaScript, Intro to Data Science, Advanced Data Structures, Applied Probability and Statistics, Multivariate Calculus, Linear Algebra

Experience

Undergraduate Teaching Assistant August 2022 – May 2023
University of Maryland *College Park, MD*

- Assisted professor in grading exams in CMSC132(Object-Oriented Programming 2) and CMSC216(Introduction to Computer Systems).
- Led discussion sections and prepared worksheets for students.
- Mentored students who need help with projects or understanding of lecture material through office hours and improved student performance in course in class of over 500 students.

Computing Instructor June 2022 – August 2022
Iribe Initiative for Diversity and Inclusion(I4C) *College Park, MD*

- Planned curriculums and taught lessons to students in I4C Summer Academy's AI4ALL, CompSciConnect, CreateTech, and JumpStart Computing camps. Fostered enthusiasm for young kids and sparked creativity through effective lesson strategies.
- Attended training to gain knowledge about classroom engagement and management, co-teaching methods, effective lesson strategies, and using various software.
- Taught groups of high school and middle school students Scratch, Python, JavaScript, Wearable Tech, and Machine Learning.

Projects and Activites

QuickTrack Fitness Tracker | *JavaScript, ReactJS, Node.js, Express.js, MongoDB* Jul 2023 – Present

- Created a Fitness Tracker App that allows users to plan their workout schedule and view their overall progress and statistics using ReactJS for frontend development and Node.js + Express.js as a backend
- Utilized MongoDB to retrieve and store data related to user's overall progress and daily workout routine
- Combined concepts of react routers to display different pages and redux to store the central states of the application

Heart Failure Prediction | *Python, Scikit-learn, Pandas* February 2022 – March 2022

- Designed and Implemented a data science and supervised machine learning workflow in Python for heart failure prediction use case.
- Stored and managed data using Pandas, and carried out feature engineering, Decision Tree model construction in Scikit-learn, and performance testing in a team of 2.
- Measured 94% accuracy using a confusion matrix.

MicroCaml Lexer, Parser, and Interpreter | *Ocaml* November 2022 – December 2022

- Created a micro Lexer, Parser, and Interpreter with Ocaml.
- Evaluated given expressions through tokenization of the expressions into lists of words, parsing the lists into abstract syntax trees(AST), and finally executing the ASTs.

Extracurricular Activites August 2021 – present

BigTh!nk AI Club, Career Science Club, Intramural basketball (3v3), Computer Science Honors

Technical Skills

Languages: Java, Python, C, Ocaml, JavaScript, HTML/CSS, Ruby, Assembly
Frameworks/Libraries: React.js, Pandas, Scikit-learn, NumPy, Matplotlib, Express.js, MongoDB, Node.js
Skills: Front-end Development, Machine Learning, Object-Oriented Programming, Computer Systems, Teamwork and Collaboration