Dylan Lewis

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EDUCATION

Massachusetts Institute of Technology

Cambridge, MA

Masters of Engineering in Electrical Engineering and Computer Science; Concentration: Artificial Intelligence

Expected February 2022

Massachusetts Institute of Technology

Cambridge, MA

Bachelor of Science in Electrical Engineering and Computer Science; GPA: 4.3/5.0

May 2020

Relevant Coursework: Software Studio, Data Structures & Algorithms, Software Construction, Introduction to Machine Learning, Machine Learning & Data Science in Politics, Computer Systems Engineering, Signal Processing, Linear Algebra, Probability

SKILLS

• Languages: Expert:{ Python, JavaScript, R, HTML/CSS }, Proficient:{ Java, C++, SQL }

Technologies: Docker, Git, Node.js, Linux

• Libraries & Frameworks: D3.js, Express.js, NumPy, pandas, React, Vue.js

EXPERIENCE

Southwest Research Institute, Defense & Intelligence Solutions

San Antonio, TX June 2020 - Present

Graduate Student Intern

• Developing a full-stack web application with a React frontend and Express.js backend using REST API and a JSON-based database

- Utilizing Docker containers for development environment and building an image of the application
- Designing the UI of the application by iterating on the React frontend based on feedback from peer review

Isobar Boston, MA

Front-end Development Intern

May 2019 - August 2019

- Translated business logic and user stories into enhancements to a popular car rental company website UI using React components
- Stylized webpages with SCSS based on design specifications and mockups
- o Participated in code review to ensure code quality and standards
- Wrote manual tests to ensure that implementation met functional requirements

Interphase EDGE, Office of Minority Education, MIT

Cambridge, MA

Chemistry Teaching Assistant

June 2017 - August 2017

- Led introductory chemistry recitations to 11 incoming MIT freshmen in the Interphase EDGE summer program where students take a full college courseload
- Created worksheets, problem sets, review materials, and exams that assisted students in developing the problem-solving skills they would need to succeed in the introductory chemistry course every MIT student must take

PROJECTS

- Boomerang: Full-stack web application where users can efficiently and reliably borrow items from others within their communities.
 - o Implemented full stack functionality and user interface for login page and sign up flow
 - o Connected site data to a MySQL database using the framework Sequelize
 - o Wrote back-end web services using Express.js and front-end logic in Vue.js
 - Presented design and features of the application to peers and staff of the Software Studio course
- Analysis of Trump's Campaign Rhetoric on a Regional Level: Data Science project utilizing R & pandas that investigated how Donald Trump's 2016 campaign speeches may have influenced public sentiment on a regional level.
 - o Cleaned data collected from multiple speech corpus in preparation for analysis
 - Conducted descriptive analysis: we found that in swing states like Florida, Trump emphasized words related to Hillary Clinton and her
 email scandal more than across the entirety of his campaign suggesting that he was strategizing his rhetoric to hurt Hillary's campaign
 in an effort to win the swing states.
- Competitive Crossword Puzzle: Game written in Java using client-server model and multi-threading where players race against each other to complete a crossword puzzle.
 - o Implemented server-side logic allowing multiple clients (players) to connect and compete in crossword puzzle games
 - Wrote specifications for client-side logic
 - o Generated test cases for crossword puzzle game logic