

(201) 983-9162 mansookim09@gmail.com Orlando, FL PORTFOLIO GITHUB LINKEDIN

React, Redux, Ruby, Rails, JavaScript, HTML, CSS, SCSS, SQL, MongoDB, Mongoose, Node.js, Express, PostgreSQL, SQLite3, Webpack, Git, Heroku, Python, Java, C, R

## **EDUCATION**

App Academy New York, NY

August - November 2021

Immersive full stack web development software engineering course with 1000+ hours of coding

Georgia Institute of Technology Atlanta, GA

August 2017 - May 2019

MS in Computer Science with specialization in Machine Learning - GPA: 4.00

Coursework: Machine Learning, Artificial Intelligence, AI for Robotics, Reinforcement Learning, Computer Vision, Data & Visual Analytics, Machine Learning for Trading, Big Data for Health Informatics, Software Development Process, Graduate Algorithms

Boston College Chestnut Hill, MA

August 2012 - May 2016

BS in Biochemistry with minor in Computer Science - Cumulative GPA: 3.89, Minor GPA: 4.00, summa cum laude

## **PROJECTS**

Discode (Ruby on Rails, React, Redux, WebSockets, AWS S3)

live | github

A single page web app clone of Discord featuring real-time chat.

- Utilized Rails Action Cable WebSockets and Redis to implement live-chat, allowing logged in users to chat in multiple different chat rooms each with its own chat history and participants.
- Implemented React Redux containers and selectors to efficiently manage front-end state, resulting in smooth rendering when switching between previously fetched servers, channels, and direct messages.
- Incorporated AWS S3 to store uploaded images, enabling users to set custom profile avatars and server icons.
- Applied Rails polymorphic associations and concerns to write DRY code for different chat channels/DMs/group chats.

Koko (MongoDB, Express, React, Node.js, Redux, Mongoose)

live | github

Work together with Koko the cat to develop better mental health wellness habits.

- Provided a seamless single page web app experience by selectively rendering React components based on user interaction.
- Leveraged Redux global state with selectors to create components such as daily history page and modular widgets.
- Refactored and integrated code from all other developers to deliver frontend and backend compatibility as the flex developer.

NBA Stats (JavaScript, HTML, CSS, D3.js, TensorFlow.js)

live | github

A data visualization project with a machine learning sandbox for NBA stats.

- Designed and implemented an interactive scatter plot with D3 library to showcase NBA stats.
- Engineered a machine learning sandbox powered by TensorFlow that lets users explore relationships between different stats by training a neural network on user-selected stats then testing its predictions on an output stat.
- Employed SCSS to build a clean UI/UX that clearly highlights a large number of data points without distractions.

## **EXPERIENCE**

Georgia Institute of Technology, College of Computing Atlanta, GA

Teaching Assistant for graduate course Artificial Intelligence

January 2018 - May 2019

- Managed a class of over 400 students on a daily basis, providing instruction regarding course materials and operations.
- Wrote exam questions and programming assignments and conducted weekly office hours to support individual student needs.
- Spearheaded management of plagiarism cases and lead initiative to streamline their detection pipeline, resulting in a 30% reduction in the number of plagiarism cases.

Boston College, Department of Chemistry Chestnut Hill, MA

Undergraduate Research Assistant

September 2015 - April 2016

- Implemented simulated annealing, a randomized optimization algorithm, to find optimized parameters of molecules.
- Developed Python scripts to automate the parametrization of studied molecules, enabling these molecules to be successfully modeled in computational chemistry molecular modeling software.