

Mohammad Al-Robaie

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EDUCATION

University of Nebraska-Lincoln

Lincoln, NE

Major: Computer Science & Mechanical Engineering

Graduation: May 2024

Honors: Regents Scholar, Susan Buffet Scholar, Engineering Dean's List (3 years), Raikes Design Studio

Current GPA: 3.80

EXPERIENCE

Medical Solutions

Lincoln, NE

Software Developer

August 2023 - Current

- Engineered an AI chat application, leveraging the OpenAI and Marvin APIs, with a React frontend and Python backend
- Contributed to Agile scrum workflow, with 2-week sprints, weekly sponsor meetings, and daily collaborative sessions
- Designed prototype in Figma, integrated user feedback, & implemented features in TypeScript with Tailwind CSS styling
- Researched and curated specialized datasets for AI contextualization, optimizing performance of the chat application

Gateway Auto

La Vista, NE

Software Engineer Intern

May 2023 - Current

- Testing HTTP requests on Postman, making API calls in cURL, JavaScript (node-fetch), fetching data from cloud-based shop management systems (Tekmetric, CCC Secure Share), using custom methods to manipulate & store JSON data
- Setting up a Heroku server & using Git commands to deploy scripts, connecting APIs to enhance customer dashboard
- Consulting software engineers, attending weekly standups, contacting API companies to resolve recurring tech issues

University of Nebraska-Chemical & Biomolecular Engineering

Lincoln, NE

Machine Learning Researcher

January 2023 - May 2023

- Utilizing machine learning environments (Python, Tensorflow, Keras, etc) to analyze a dataset of over 50,000 RNA sequences, aiming to find patterns to predict the reactivity of certain DNA strands obtained by lab experiments
- Enhancing performance of the prediction algorithm on experimental data, hyperparameter optimization, & running fine tuned models on GPUs (Crane, Google Collab, DeepNote), presenting findings & data visuals during bi-weekly standups

University of Nebraska-College of Engineering

Lincoln, NE

Teaching Assistant

August 2022 - May 2023

- Teaching a 30-student Computer Science I lab section for CSCE 155N (**MATLAB**)
- Holding office hours to help students with coding assignments, debugging, grading homework
- Providing feedback and guidance to help solve engineering problems simulated in MATLAB

BEACON-Better Ethics and Consumer Outcomes Network

Denver, CO

Software Engineer Intern & Marketing Strategist

November 2021 - May 2022

- Built a headless Chromium based browser program using Puppeteer Node.js to evaluate legal agreements, collect data, then automatically populate the company's research team database; consulted engineers to optimize code efficiency
- Developed marketing automations for BEACON social media & newsletter, via Airtable & Zapier

PROJECTS

NeuroSim

December 2022 - January 2023

Co-building a website rendering a 3D anatomical brain to model the fascinating efficiency of neural circuits and info processing in the human brain. Implementing a nav bar, components menu, footer, and a 3D canvas via React fiber and Three JS while designing the UI/UX using CSS and Bootstrap.

Ecart

October 2022 - December 2022

Building a functional frontend for an ecommerce store with product categories, a promo Carousel, product listings, login, and a responsive shopping cart, via React JS, React-Bootstrap, HTML & CSS.

Profit Optimizer

July 2022 - August 2022

Utilizing dynamic programming in C++ to develop a workflow optimizer where the user provides duration, profit, deadline, and timeframe of certain tasks, to obtain the maximum profit for completing a subset of the jobs under constraints.

TECHNICAL SKILLS

Programming: • JavaScript • React • Node • Puppeteer • React fiber • Three JS • HTML • CSS • SCSS • Java • C • C++ • C#.NET • Python • MATLAB • SQL • Github • Agile • VS Code • VS Community • LaTeX • Airtable • Zapier • Integromat • Postman • Figma

Bilingual: Fluent in English and Arabic