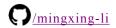
MINGXING LI











Personal Summary

Software Engineer with a PhD on Materials Science and Engineering, a master on Physics. A problem solver with passion on coding and math. Seeking for a role to learn, grow and apply technical skills.

Technical Skills

(Languages & Technologies) JavaScript, Python, HTML5, CSS3, PostgreSQL, React, Redux, Node.js, Webpack, Sequelize, Express.js, Git. (Tools) Github, VSC, Heroku, Render, Material UI, npm. (Methodologies) Test-Driven Development (TDD), Progressive Web App (PWA).

Projects

GOJI | C2C Web App | Team Project (link)

November - December 2022

- Leveraged React to design and construct a fast, reliable app with an engaging user experience.
- Integrated Redux store to manage application state while building user interface.
- Developed RESTful APIs for CRUD operations, allowing users to edit, add, and delete services.
- Setup map to show locations of users with search, filter, and link properties based on Google Maps Platform.
- Implemented a Progressive Web App (PWA) to ensure app portability and compatibility on all platforms.
- Utilized Excalidraw to manage tasks across the team.
- Collaborated with the team through peer debugging, trouble shooting, functional testing, and performing code reviews, pull requests, and determining priorities during web development.

Foodieshop | Ecommerce App | Team Project (link)

October - November 2022

- Utilized React and Redux to build an ecommerce app for buying and selling pet food.
- Designed the database schema and set up relational database to support standard SQL queries.
- Constructed interface for the frontend to interact with the PostgreSQL database described by JSON schemas through Sequelize ORM (Object - Relational Mapping).
- Authenticated users with Epxress middleware and encrypted data to protect user information.
- Implemented localStorage to cache data efficiently for adding and deleting items from guest cart.
- Deployed app on Heroku/Render and managed deployments using Github actions.

AI Music Player | Solo Developer (<u>link</u>)

November 2022 - Present

- Programmed in Javascript, HTML5, CSS3, React, and Material UI to develop and design a website to play music controlled by voice.
- Fetched data from Spotify APIs with Alan AI and built a user interface with Material UI.
- Utilized TDD to iteratively build the website.

Experiences

Software Engineer Student

FullStack Academy, NY | May 2022 - Dec 2022

Learned and developed fullstack web applications and SPAs by NERP (Node, Express, React, PostgreSQL) stack.

Scientific Associate

Brookhaven National Laboratory, Upton, NY | Jan 2021 – now

- Developed structure models and simulated XRD data in Python with various algorithms.
- Interacted and collaborated with customers/users to help them with instrument setup and data processing.

Research Associate

City University of New York, New York, NY | Sep 2019 – Jan 2021

Designed and simulated the interaction between the 3D nano particles and photonic crystals with TypeScript.

Research Associate

Brookhaven National Laboratory, Upton, NY | Aug 2016 – Aug 2019

• Developed GUI with python to read, fit and plot data.

Education

Certificate in Software Engineering

Ph.D. in Materials Science and Engineering

M. Sc. in Physics

B. Sc. in Physics

FullStack Academy - New York, NY | Dec 2022 University of Tennessee - Knoxville, Tennessee | Jul 2016 Shandong University - Ji'nan, China | Jul 2011 Shandong University - Ji'nan, China | Jul 2008

Awards & Activities

• Academic achievements on researches: more than 40 publications with > 1000 citations (<u>link</u>) and 1 patent (<u>link</u>).