Meng (Maggie) Tian

Full Stack Developer | Software Engineer

Seattle, WA |917-561-3536| mengtian.thu@gmail.com | [GitHub](#) | [LinkedIn](#) | [Portfolio](#) |U.S. Permanent resident|Open to work

TECHNICAL SKILLS

Languages: Javascript, Python, R, Matlab, SQL, SAS, HTML, CSS, LaTeX
Frameworks: Node.js, React, Redux, Flask, Express, Sequelize, SQLAlchemy, PostgreSQL, SQLite3, SocketIO, AWS S3,Docker
Data/Machine Learning: TensorFlow, Numpy, Pandas, Scikit-Learn, Matplotlib, Statistical Modeling, Data Mining
Expertise: Git, Kanban, Object-Oriented Programming (OOP), Test-Driven Development (TDD), Data Structures & Algorithms, Debugging, Deployment, Database management, Agile Project Management, Team communication

PROJECTS

FlavorEats, *Full Stack Developer* - Python | Javascript | React | Redux | Flask | AWS | Google Maps API   [Live](#) | [GitHub Repo](#)
An all-in-one app that combines food search, multi carts ordering, reviews and store admin dashboard, inspired by UberEats & Yelp.
- Developed **Flask** backend API server and integrated with **React** for intuitive and responsive UI.
- Built **PostgreSQL** database and set up schema. Optimizes queries using **SQLAlchemy** to maintain data integrity.
- Devised a versatile multi-way search feature with **JavaScript** and React, along with geolocation-based search via **Google Maps API** and **local storage** location caching, elevating food search and ordering experience.
- Stored image uploads in the cloud using **AWS S3** buckets, significantly reducing server load and enhancing scalability.

PinThis, *Full Stack Developer* - Javascript | Python | React | Redux | Flask | Node.js | SQLAlchemy | AWS   [Live](#) | [GitHub Repo](#)
A finely crafted Pinterest clone that offers appealing image browsing, effortless collaboration, and social connections.
- Utilized **Redux** store for global state management, predictable data flow and synchronized **DOM** rendering.
- Created unique styling with custom React components and animations using (asynchronous) **Javascript** and **CSS**.
- Thoughtfully scripted **Flask** routes to manage intricate relational data, ensuring seamless user interactions.
- Key role in 4-member team: code debugging, feature planning, **Git** version control. Achieved cohesive project delivery

MeetFun, *Full Stack Developer* - Javascript | Express | Sequelize | SQLite3 | React | Redux | AWS   [Live](#) | [GitHub Repo](#)
A Meetup-inspired app focusing on community engagement and featuring group, event management and membership administration.
- Created robust backend routes using **Node.js** and **Express.js**, defining API endpoints and managing **HTTP** requests.
- Utilized **Sequelize** ORM to interact smoothly with **PostgreSQL** database,ensuring efficient data storage and retrieval.
- Ensured user security by integrating end-to-end user authentication and authorization. Combined backend and frontend measures, including **CORS, CSRF** protection, **JWT** tokens, **BCrypt** hashing, and protected **React Router**.
- Implemented error handling middleware and rigorously tested backend routes using **Postman** for API functionality.

EXPERIENCE

Research Engineer   Jun 2021 - Sep 2022
Baruch College, City University of New York
- Managed **>200GB** daily stock option trading database. Developed algorithms in *Matlab* to build trading signals and dynamic investment portfolios. Achieved remarkable *70%* risk reduction and largely enhanced trading performance.
- Data mining in *SAS*, and employed *machine learning* (Lasso, Ridge, clustering, random forests, boosting trees), **Scikit-Learn, Numpy** and **Pandas** tools in **Python** to perform exhaustive analysis on **104** key option predictors.
- Successfully published *2 papers* in top tier finance journals - *Management Science & Review of Asset Pricing Studies.*

EDUCATION

App Academy, *Full Stack Development*   Feb 2023 - Aug 2023
Baruch College, City University of New York, *PhD in Finance, GPA: 3.7*   Aug 2013 - Jun 2021
New York University, *Visiting Scholar*   Feb 2017 - Aug 2017
Tsinghua University, *Bachelor of Economics and Finance, GPA: 3.4*   Aug 2008 - Jun 2012