Michael W. Lu

About Me -

Full-stack software engineer with 4 years of technical leadership experience, combining strong programming skills with proven ability to drive product direction and mentor teams.

Modernized enterprise systems with significant performance improvements while translating complex business requirements into effective technical solutions.

Pronouns: he/him

Skills —

Technologies

JavaScript, TypeScript, C#, Python, SQL, HTML/CSS, REST API, Git, Bash, Jira, Figma

Frameworks & Libraries

React, Next.js, .NET, Entity Framework, TanStack Query/Table, React Hook Form, Bootstrap, Tailwind CSS, Jest

Certifications & Awards

Scaled Agile SAFe® 5 Practitioner

HackerRank Certificates: JavaScript, React, REST API, C#, SQL

Spatial Front Team Hackathons: 1st place (Oct 2021, Oct 2023), 2nd place (Apr 2021, Jul 2021, Apr 2022, Apr 2023, Jul 2023)

English, Mandarin Chinese (conversational)

Interests

Weightlifting, menswear fashion, consumer technology, crosswords, cooking, mixology

Education —

New York University | New York, NY Stern School of Business, Class of 2013 B.S. in Finance & Economics

Contact —

- San Francisco, CA
- (214) 708-0771
- michaelwenlu@gmail.com
- www.michaelw.lu
- github/michaelwlu
- linkedin/michaelwlu

Experience -

Spatial Front, Inc. 2 | Remote | Feb 2021 - present

(Government-contract IT solutions provider specializing in geospatial technologies)

Technical Lead Manager (Apr 2022) | Front-End Technical Lead (Sep 2021) | Software Engineer (Feb 2021)

- Led software development of two systems for the U.S. Department of Agriculture, deploying conservation solutions for 2,500 field offices and 15,000 monthly active
- Directed 20 professionals across two cross-functional teams, providing guidance and mentorship to engineers, testers, designers, and business analysts

Project: Conservation Practice Documents - Document Management System (.NET 6, React, MS SQL Server, MS SharePoint)

- Spearheaded the turnaround of a stalled initiative, delivering a modernized system that retired legacy software and saved \$300,000 in annual licensing fees
- Architected a relational database schema powering a workflow engine that handles 60,000 documents across 16 workflows and 53 document types

Project: Field Office Technical Guide (.NET Framework, React, MS SQL Server, Elasticsearch)

- Built an Elasticsearch search engine that indexed 160,000 documents, enabling users to perform full-text searches across the entire document repository
- Designed and implemented batch operations, accelerating content management workflows by enabling 25 simultaneous actions
- Modernized the React codebase by migrating to functional components and custom hooks, achieving 78% reduction in component size while improving maintainability and testability

Independent Project Work | New York, NY | Mar 2020 - Feb 2021

- Project: Definitely Not Reddit Reddit clone with user authentication, embedded media content posts, meta link previews, and comments
- Project: Melody Chuang Coaching Professional small business website with contact forms and social media widgets

The Recurse Center | New York, NY | Jan 2020 - Mar 2020

(Community-driven, self-directed educational retreat)

Programming Sabbatical

- Self-studied programming fundamentals and full-stack web development in an immersive environment with 35 fellow programmers ranging from novices to experts
- Collaborated with peers in dozens of pair programming sessions and presented 3 talks to foster knowledge sharing

NYU Langone Health [2] | New York, NY | Mar 2014 - Jan 2020 Senior Financial Analyst (Aug 2017) | Financial Analyst (Mar 2014)

- Oversaw financial management of research activities at the Neuroscience Institute. playing a pivotal role in expanding funding from \$20M to \$40M in 6 years
- Pioneered a financial modeling system using MS Excel, providing analytical and strategic decision-making capabilities to 32 research labs

Community —

Code Nation 2 | New York, NY | Oct 2022 - May 2024

(Non-profit providing coding education to under-resourced youth)

Volunteer Instructor

- Taught introductory HTML/CSS/JavaScript to classes of 15-20 students at NYC public high schools in twice-weekly virtual and in-person sessions
- Built up competence and curiosity in students under-represented in tech, resulting in 67% of alumni entering a STEM-related field compared to 8% population baseline