

Michael W. Lu

About Me

Software engineer and architect currently driving product direction and spearheading engineering efforts across multiple teams.

Combining self-taught programming acumen with a finance background, I catalyze innovation and deliver smooth end-to-end experiences, earning consistent recognition and rapid advancement.

Pronouns: he/him

Skills

Technologies

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

Frameworks & Libraries

React, Next.js, .NET, Redux Toolkit, React Query, React Hook Form, React Table, 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; 2nd Place – Apr 2021, Jul 2021, Apr 2022, Apr 2023, Jul 2023

Languages

English, Mandarin Chinese (conversational)

Interests

Weightlifting, menswear fashion, consumer technology, crosswords, dog training, cooking & mixology

Education

New York University | New York, NY

Stern School of Business, Class of 2013

Bachelor of Science in Finance & Economics

Contact

📍 New York, NY / San Francisco, CA

📞 (214) 708-0771

✉️ michaelwenlu@gmail.com

🌐 michaelwenlu.com

🐙 [github/michaelwlu](https://github.com/michaelwlu)

📄 [linkedin/michaelwlu](https://www.linkedin.com/in/michaelwlu)

Experience

Spatial Front, Inc. [🔗](#) | Remote | Feb 2021 – present

(Leading government IT solutions provider specializing in geospatial services)

Team Lead/Architect (Apr 2022) | **Front-End Technical Lead** (Sep 2021) | **Software Engineer** (Feb 2021)

- Lead software development on two systems for the U.S. Department of Agriculture, successfully deploying high-quality solutions critical to natural resource conservation missions and relied upon by 2,500 USDA field offices and 15K monthly active users
- Direct 20 professionals across two cross-functional teams, providing guidance and mentorship to engineers, testers, designers, business analysts, and scrum masters

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

- Optimized application architecture to prioritize data consistency between SharePoint cloud storage and SQL database, leveraging institutional Microsoft 365 subscriptions to reduce expenses by \$300K in annual licensing fees
- Designed a relational database schema to support a workflow engine for document publication, enabling dynamic configuration of status transitions, action authorizations, and conditional task executions for 200+ conservation practices

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

- Developed an enhanced search feature built on Elasticsearch and backed by a data synchronization strategy involving push updates and scheduled batch jobs, providing users with the ability to full-text search 160K documents
- Implemented multi-document upload, move, and archive batch operations, increasing curation throughput by 25X for content managers
- Modernized React codebase by converting components from class-based to functional, abstracting logic into reusable hooks, and streamlining state management, resulting in improved maintainability and modularity (78% reduction in component lines of code)

Freelance & Independent Project Work [🔗](#) | New York, NY | Mar 2020 – Feb 2021

- Project: Definitely Not Reddit – Reddit clone with user authentication, content posts (text, embedded media, meta link previews), upvotes/downvotes, and comments
- Project: Melody Chuang Coaching – Life-coaching 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 community setting of 35 fellow programmers
- Collaborated with peers in dozens of pair programming sessions and presented 3 talks to foster knowledge sharing and mutual growth

NYU Langone Health [🔗](#) | 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 over 6 years
- Pioneered the creation of a proprietary financial modeling system in MS Excel, providing enhanced analytical and strategic planning capabilities to 32 research labs

Community

Code Nation [🔗](#) | New York, NY | Oct 2022 – present

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

Volunteer Instructor

- Teach introductory web development to a class of 14 students at NYC public high schools in twice-weekly virtual and in-person sessions
- Build competence and nurture curiosity in students under-represented in tech, resulting in 67% of alumni entering a STEM-related field vs. 8% population baseline