

MICHAEL SHEN

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SKILLS & CERTIFICATIONS

Languages: Python, JavaScript, Ruby, Racket, SML, C

Technologies: React, GraphQL, MobX, Git, Pandas, Ruby on Rails, Docker, AWS CloudWatch

Actuary Exams: Probability, Financial Mathematics, Investments and Financial Markets

EDUCATION & ACHIEVEMENTS

Hunter College, City University of New York

New York, NY

Bachelor of Arts in Computer Science

September 2024

App Academy, Software Engineering Bootcamp

New York, NY

Software Engineering Immersive Program

September 2022

JP Morgan Chase & Co. Hackathon

New York, NY

Winning participant of the Code for Good Hackathon

September 2022

EXPERIENCE

Mastercard, D&S Loyalty Management Team

Boston, MA

Software Engineer I

August 2024 - February 2026

- Designed and implemented Location Management and Min/Max Spend transaction filtering features end-to-end using Ruby on Rails, React, and GraphQL, including backend business logic, API endpoints, and frontend integration, ensuring reliable spend thresholds, location restrictions, and backwards compatibility with existing systems
- Investigated and resolved production bugs in transaction flows and promotion validation that were blocking downstream transactions, coordinating fixes across multiple services to restore system reliability
- Implemented event-processing middleware to validate division lineage, enrich events with metadata, and refactor legacy logic, improving performance and eliminating redundant processing

Mastercard, DMP Performance Engineering Team

O'Fallon, MO

Software Engineer Intern

June 2023 - August 2023

- Wrote Python scripts to consolidate data using Oracle driver and Splunk SDK into unified format ingestible for InfluxDB
- Utilize Pandas to efficiently compute metrics such as server CPU usage/memory, cache speeds, and AI model performance
- Connect InfluxDB to Grafana and used Grafanalib to automate building of dashboards, allowing for quick visual comparisons and customizations of system test results

App Academy, Software Engineering Bootcamp

New York, NY

JavaScript Instructor

October 2022 - February 2026

- Guide prospective students through material while providing constructive feedback
- Answer students' technical and conceptual questions on programming concepts and JavaScript
- Gave lectures on concepts such as Higher Order Functions, Recursion, and Scope

CUNY Baruch College, Student Academic Consulting Center

New York, NY

Mathematics Teaching Assistant & Tutor

January 2021 - May 2022

- Tutored students in the following topics: Algebra, Precalculus, Calculus, Probability Theory
- Provided targeted one-on-one intervention for students as needed, improving weekly attendance by 80%
- Reinforced lessons presented by the primary instructor through weekly recitations for cohorts of 20+ students, increasing the average class grade by 50%

PROJECTS

LoopedIn (Linkedin Clone built using Ruby on Rails, PostgreSQL, JavaScript, React, Redux)

[Github](#)

- Employed Ruby on Rails to implement CRUD operations using the MVC (Model-View-Controller) framework and created RESTful API routes to interact with the React frontend
- Utilized React's lifecycle methods and Redux to manage application state and make AJAX requests
- Incorporated AWS S3 for image association on the backend, allowing users to store an image for their profiles and posts