Michael Zhan

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Education

Harvard University **Sep 2023 – Dec 2024**

M.S. Computational Science and Engineering (GPA: 3.96)

The University of Texas at Austin, Engineering Honors Program **Sep 2019 – May 2023**

B.S. Chemical Engineering (GPA: 3.99), Elements of Computing Certificate,

Technical Skills

- **Languages:** Go, Python, C++, C, TypeScript, JavaScript, HTML/CSS, Java, Kotlin, Ruby, SQL
- **Frameworks:** React, Express.js, Node.js, Next.js, Flask, Django, Spring, RESTful APIs, Agile Development
- **Developer Tools:** Git, Docker, CI/CD, AWS, Google Cloud Platform, Linux, Jira

Relevant Professional Experience

Bloomberg | Software Engineer *New York, NY* **Jan 2025 – Present**

- Developed and maintained reusable web components and large-scale content management system powering multiple high-traffic client-facing websites with tens of thousands of monthly visitors.
- Drove end-to-end AI integration with the CMS to improve content visibility and enhance user experience.
- Delivered full-stack Google Drive-like hub for seamless document sharing between clients and internal reps.

Amazon | Software Development Engineer Intern *Austin, TX* **May 2024 – Aug 2024**

- Optimized internal AWS service onboarding process using Java, Ruby, and AWS services by decoupling from monolith package, reducing onboarding time by 90%.
- Contributed to massive codebase using leading frameworks, such as Spring dependency injection.
- Deployed to production in all supported regions, benefiting 10,000 internal AWS customers.

Georgiou Research Group, UT Austin | Undergraduate Research Assistant *Austin, TX* **Jan 2020 – May 2023**

- Developed and implemented single-linkage clustering algorithms for antibody sequence strings for >100,000 inputs in Python and C++. Runs 50% faster than the previous internal tool, with identical results.
- Built k-means clustering workflow with Python scikit-learn and R to discover new gene segments in ferrets using outlier detection. Discovered 2 new genes with this method.

Genentech, Inc. | Software Engineer Intern *San Francisco, CA* **Jan 2022 – Dec 2022**

- Developed modular automation package for ML dataset generation and visualization with Python, reducing processing time by over 80%. Tool is currently in use across multiple Genentech sites.
- Engineered soft sensor machine learning models for cell culture parameter prediction using scikit-learn and AutoML libraries with an emphasis on feature optimization. Attained R^2 values of over 0.95.

Relevant Personal Projects

Splitwise Clone **Nov 2025**

- Developed a functional Splitwise clone to calculate owes and debts across group payments.
- Built full-stack service with React/Vite frontend, Go backend, and Postgres database.

Tennis Court Reservation Service **Sep 2024**

- Developed service to automate reservations in local city system in TypeScript with React and Express.
- Implemented scheduling behavior with cronjobs and webpage navigation with Playwright.

Online Poker Chips **May 2024**

- Developed room-based service to track virtual poker pots, with real-time updates using websockets.
- Built in TypeScript with Next.js and React frontend, running on Express backend.

Leadership

Independent Tutor | Austin, TX **May 2020 – Dec 2021**

- Tutored 500 hours and over 40 students remotely in high school math and chemistry.
- Managed communication and scheduling directly with students and parents.