

Eric Zheng

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EDUCATION

Tufts University, School of Engineering | *GPA: 3.76*

Medford, MA

Master of Science in Computer Science

Sep 2023 – Expected Jan 2026

- Relevant Coursework: Cloud Computing, Operating Systems, Machine Learning, Computer Vision, Software Engineering

Shanghai Institute of Technology

Shanghai, China

Bachelor of Science in Materials Science

Sep 2014 – May 2018

EXPERIENCE

Software Engineering Intern | *Cloud, LangChain, RAG, Full-stack*

May 2025 – Aug, 2025

Wendy.Trade

Austin, Texas

- Spearheaded migration of core infrastructure from AWS to GCP with **Terraform** and DevOps best practices, automating provisioning via Cloud Build CI/CD pipelines; participated across the **full SDLC** from design → infra provisioning → deployment, resulting in 15 minutes (30%) faster deployments, \$400/month (20%) cost reduction.
- Developed a Google Chrome extension using the **WXT** framework, integrating AI agent coordination via **LangChain** and **Retrieval-Augmented Generation** to enhance trading insights and reduce data retrieval latency from 850ms to 600ms (30%) and increased user query accuracy by 25% through context-aware responses.
- Developed **RESTful microservices** and TypeScript/React front-end features for user dashboard; containerized and deployed 5 services on **Google Kubernetes Engine (GKE)**; integrated Cloud SQL (**PostgreSQL**) handling 2K+ daily queries and implemented structured logging that reduced incident resolution time by 40%.

Software Engineering Intern | *Full-stack, User Testing, Agile*

May 2024 – Aug 2024

TeachTuit, Inc.

Los Angeles, CA

- Conducted iterative usability testing with 12 student users using **UserZoom** for real-time interaction tracking and feedback analysis, identifying 8 usability issues into technical requirements that improved problem-solving accuracy by 40%.
- Built a dynamic front-end with **React** for AI Math Tutor serving 100+ students; consumed **REST APIs** and integrated with **Flask** backend, using **Redis** to cache frequent queries and reduce response times from 1.2s to 400ms (67% improvement); built test automation suite using **React Testing Library** and **Pytest** ensuring 90% coverage.
- Collaborated within an **end-to-end Agile** team across 6 two-week sprints, from planning to deployment; contributed to 8 user stories and participated in daily standups, sprint reviews, and retrospectives with 8-person cross-functional team.

Tutor & Associate Product Manager | *Data Analysis, Product Management*

May 2018 – Aug 2023

OneBest International Education

Shanghai, China

- Identified user pain points and delivered a comprehensive technical solution by architecting a proprietary vocabulary testing platform for **5,000+ users**; bridged the gap between non-technical stakeholders and engineering by translating ambiguous user feedback into **comprehensive technical specifications and database schemas**, reducing administrative workload by 80%.
- Solely authored [A Comprehensive Guide to SSAT Vocabulary](#) (#1 Amazon China Bestseller), digitized this curriculum to serve as the core database for the testing platform, improved user retention by 25% through adaptive learning logic.
- Analyzed 15k+ performance records using **SQL & Tableau** to uncover curriculum gaps, leading to the launch of 5 new data-driven courses that generated a **\$120K revenue increase** and improved average student scores by 30%.

PROJECTS

DistribCache [Link](#) | *Go/Golang, Distributed Systems, Networking*

Sep 2025 – Present

- Engineered a distributed peer-to-peer storage system in Go with custom **TCP transport, AES encryption, and SHA1 content-addressing** that enables secure file replication across network nodes with automatic TTL-based expiry, reducing storage overhead by auto-deleting expired content.
- Architected **fault-tolerant file synchronization** using broadcast messaging and metadata persistence that maintains data consistency across multiple nodes, supporting both online propagation and offline recovery scenarios.

Car Rental Booking App [Link](#) | *Java, Spring Boot, Kafka, MongoDB*

May 2025 - Aug 2025

- Built an end-to-end full-stack car-rental platform using **React, Tailwind CSS, and a Java Spring Boot** backend with JWT authentication and RBAC; reduced page load times by 78% (from 2.3s to sub-500ms) through optimized API and caching.
- Architected backend services with domain-driven service layers, JPA repositories, and validation pipelines; integrated **Apache Kafka** to decouple booking, payment, and inventory-update events, achieving 99.5% event delivery success rate and reducing booking confirmation delays from 8-12 seconds to under 2 seconds while handling 150+ concurrent bookings during peak testing.
- Developed an admin dashboard supporting vehicle/pricing CRUD, real-time search/filters, and **ImageKit CDN** uploads; deployed on Vercel with GitHub Actions CI/CD and environment secrets, connected to a managed MongoDB Atlas cluster.

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, C, C++, SQL, HTML/CSS, Golang

Frameworks: React, Spring Boot, Node.js, Express.js, FastAPI, Django, Flask

Databases: PostgreSQL, MySQL, MongoDB, NoSQL

Cloud & DevOps: AWS (ECS, RDS), GCP, Docker, Kubernetes, Terraform, CI/CD, Git/GitHub

Technologies: Pytest, REST APIs, JDBC, Redis, JSON, YAML, Markdown