Steven Zhu

Brooklyn, New York | zhujunhao1226@gmail.com | (929)-754-7166 | LinkedIn

EDUCATION

New York University   Sept. 2024 – May 2026 (Expected)
Master of Science in Computer Engineering

University of Illinois at Urbana Champaign   Sept. 2020 – June 2024
Bachelor of Science in Computer Engineering

Zhejiang University   Sept. 2020 – June 2024
Bachelor of Engineering in Computer Engineering

SKILLS

- **Programming Languages:** Python, Java, C/C++, Javascript, TypeScript, HTML/CSS, SQL
- **Frameworks:** PyTorch, TensorFlow, React, Vue.js, Next.js, Spring Boot, Django
- **Tools:** Git, Docker, AWS, PostgreSQL, MongoDB, Google Cloud Platform (GCP)
- **Relevant Courses:** Data Structures and Algorithms, Machine Learning, Database System, Distributed System

WORK EXPERIENCE

ZTE Corporation - Zhongxing Development Ltd.   June – Aug. 2024
Software Engineer Intern

- Enhanced a microservices-based university entrance exam registration system by implementing five key features using Vue.js for front-end interfaces and Spring Boot for back-end services, optimizing the system to handle over **5,000** concurrent users with Nginx load balancing.
- Designed and implemented RESTful APIs for database integration, using Redis for caching and JWT for authentication, reducing query latency and achieving response times under **30ms**.
- Integrated MinIO for efficient and secure file download management, establishing a download center that reduced page freezing issues and decreased waiting time by **30%**.
- Led bi-weekly machine learning knowledge-sharing initiatives, developing training materials and mentoring **20+** colleagues, resulting in three successful cross-team ML projects implementations.

PROJECTS

GCP-Based Flight Query System | *GCP, React, MongoDB*   Apr. – June 2023

- Developed a predictive flight scheduling system using a US flight delays and cancellations dataset, improving efficiency by **30%** and reducing delay risks by **15%**. Employed machine learning models hosted on GCP and achieved **90%** prediction accuracy.
- Engineered a high-performance React frontend to analyze **29M+** flight records, implementing Redux for efficient state management and D3.js for interactive visualizations.
- Optimized MongoDB database performance through strategic indexing and aggregation framework, resulting in **65%** faster query response time and **35%** reduction in CPU utilization.

Cryptocurrency Tracker | *Next.js, Node.js, PostgreSQL, Firebase*   Oct. – Dec. 2022

- Architected and deployed a high-performance cryptocurrency analytics platform using Next.js and Material-UI, achieving **30%** faster page load times through server-side rendering and code splitting optimizations.
- Designed and implemented a scalable backend infrastructure with Node.js and PostgreSQL, achieving **100+** concurrent comment operations per minute.
- Developed secure user authentication system with Firebase, implementing features like OAuth, email verification and password recovery, leading to successful onboarding of **1,000+** users.

Meta-Sampling for Multimodal Sentiment Analysis | *PyTorch, Machine Learning*   July 2021 – Jan. 2022

- Tackled the challenge of partial missing modalities in multimodal sentiment analysis (MSA), enhancing the model's adaptability and robustness compared to traditional approaches that assume fully missing data.
- Conducted extensive experiments on prominent datasets, including IEMOCAP, SIMS, and CMU-MOSI, achieving a **2-3%** performance improvement over current state-of-the-art models.
- Co-authored a paper titled "Missing Modality meets Meta Sampling (M3S): An Efficient Universal Approach for Multimodal Sentiment Analysis with Missing Modality," presented at AACL/IJCNLP 2022.