Zheyi Zhuang

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Education

Carnegie Mellon University, School of Computer Science — December 2026

- Master of Software Engineering
- Relevant Coursework: Design Patterns, Product Managements, Statistics for Decision Making, Formal Methods

University of Washington, Paul G. Allen School of Computer Science — December 2022

- Bachelor of Science in Computer Science
- Cumulative Grade Point Average: 3.85/4.0; Dean's List: 13 quarters
- Relevant Coursework: Machine Learning, Natural Language Processing, Operating Systems, Algorithms, Computer Graphics

Professional Experience

Microsoft Corporation (C) — April 2023 - October 2024

Software Engineer I – Team CMD AI Devices

- Architected and delivered an end-to-end people identification system in Microsoft Teams meeting rooms, expanding AI capabilities to legacy hardware and improving accessibility for enterprise clients.
- Engineered and optimized a real-time face detection pipeline processing 1080p video at 30fps with 99% accuracy, directly enhancing meeting experiences for 10M+ global users.
- Collaborated cross-functionally with security and compliance teams to design a privacy-first face enrollment pipeline.
- Enhanced multilingual voice recognition capabilities, raising accuracy to 95% across 40+ languages, improving inclusivity for international Teams adoption.
- Instituted a robust testing framework with 95% code coverage for AI/ML components, cutting regression incidents by 30%.

BeaconFire Inc., New Jersey (Remote) — August 2022 - December 2022

Full-Stack Engineer

- Spearheaded internal management platform and activated scalable frontend infrastructure for developer onboarding.
- Streamlined CI/CD pipelines to deploy internal tools, shortening deployment times by 10 mins per release.
- Wrote 100+ unit/component/automated tests to ensure zero downtime in CI/CD releases.

Academic Experience

University of Washington, Seattle — June 2021 - August 2022

Web Development Teaching Assistant

- Taught and supported 40+ students in advanced web development concepts and algorithms.
- Mentored students in software design principles and led code reviews for student projects.

Sensors, Energy, and Automation Laboratory, University of Washington — February 2020 - June 2021

Software Engineer - Research DevOps Team

- Led development of a research-oriented content management system enabling real-time data analysis for 500+ daily entries.
- Designed and automated a research data processing microservice, eliminating 30-hour human labor per week.

Projects

Cypress — Collaborative Knowledge Management Platform, Independent Project

- Architected and implemented a Notion-like platform supporting real-time collaborative document editing and version control.
- Implemented BERT-based NLP algorithms for real-time text analysis, summarization, and document retrieval.

Skills

Programming Languages: JavaScript/TypeScript, Python, Go, Java, C++, C#, Shell Scripting.
Frontend Tools: React, NextJS, Redux, Apollo Client, Jest, Tailwind CSS, shadcn/ui.
Backend Tools: NextJS, Apollo Server, NodeJS, Gin, Java Spring Boot.
Architectures & Services: RESTful APIs, GraphQL APIs, Microservices.
Machine Learning: PyTorch, TensorFlow, HuggingFace, Scikit-learn, Computer Vision, NLP, BERT.
CI/CD & Tools: Linux/Unix, Git, Docker, Kubernetes, Azure Pipeline, GitHub Actions.
Databases: PostgreSQL, MongoDB, Redis, Azure Cosmos DB.
Cloud Platforms: Azure (ML, DevOps, AAD), Supabase, AWS (EC2, S3, Lambda).