

Haochen (Hao) Zeng

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PROFESSIONAL SUMMARY

Creative Technologist specializing in robotics, AR/VR, and data visualization. Skilled at building innovative solutions using cutting-edge technologies with strong project leadership across emerging technology domains. Proven ability to lead cross-functional teams and translate complex technical requirements into innovative solutions.

EDUCATION

UNIVERSITY OF WASHINGTON

M.S. Technology Innovation, Robotics Track, GPA 3.96/4

Seattle, WA
Sep. 2023 - Mar. 2025 (Expected)

UNIVERSITY OF ROCHESTER

B.S. Business Analytics, B.A. Computer Science, GPA 3.6/4

Rochester, NY
Aug. 2018 - May 2023

EXPERIENCE

Aigen (autonomous weeding robotics company)

Robotics Product Engineer · Apprenticeship

Seattle, WA
Sep. 2024 - Present

- Built scalable visualization platform processing 2000+ hours of robot telemetry from 30+ autonomous vehicles
- Architected AWS solution (Amplify, S3, Lambda, Athena) for React/Next.js dashboard hosting and data processing
- Pioneered field visualization system with proprietary algorithms and Mapbox API integration

University of Washington

Technical Project Manager | IT Specialist · Part-time

Seattle, WA
Jan. 2024 - Present

- Architected transition of robotics class curriculum from ROS to ROS2, rewriting and optimizing lab assignments
- Implemented VR and 360-tour with WebGL rendering, increasing department engagement by 25%
- Prototyped custom hardware solutions using CAD and 3D printing deployed across UW Business School and GIX
- Reduced system downtime by 45% and improved efficiency by 30% across IT projects

CSDN (largest Chinese software developer community worldwide)

Technical Editor · Part-time

Beijing, CN & Remote
Apr. 2023 - Present

- Developed weekly technical SWE articles reaching 200k+ views across software developer community
- Facilitated \$900k partnership with Linux Foundation and Futurewei for KubeCon and GOSIM conferences
- Conducted technical interviews with AI pioneers including Stuart Russell and Joel Lehman
- Built GOSIM technical community with 2000+ followers and 30% month-over-month growth

InOrbit.AI (AI-powered robot orchestration platform)

Robotics System Engineer · Apprenticeship

Seattle, WA
Mar. - Jun. 2024

- Architected distributed robot orchestration system using ROS2, improving pick-and-place efficiency by 20%
- Developed and maintained product roadmap for Create 2 robot integration, aligning with key stakeholder requirements
- Developed microservices-based control portal with real-time WebSocket for 30% faster robot deployment
- Implemented UX improvements based on user research, increasing task completion by 40% and reducing latency

University of Rochester

AR/VR Engineer | Studio X, River Campus Libraries · Part-time

Rochester, NY
Sep. 2021 - May 2023

- Engaged 1.3k students and faculty through weekly technical VR coding, 3D modeling sessions, and demos
- Led team of 6 developers creating AURUM, a medieval alchemy VR game for education in Unity
- Implemented test-driven XR dev methodology, increasing team velocity by 30%
- Optimized rendering pipeline for medieval VR experience, achieving 60fps on Quest 2 with 95% positive user feedback

CAMPUS ACTIVITIES & LEADERSHIP OPPORTUNITIES

MLH DandyHacks (annual hackathon at UR)

Director 2021, Communications Team Member 2020

Rochester, NY
Mar. 2020 - Mar. 2022

- Directed hackathon with 700+ participants and 38 project submissions, first MLH event post-COVID
- Independently secured \$20K budget and key partnerships with Google Cloud, MLH, and M&T Bank
- Directed cross-functional team of 14 students, achieving 50% YoY participation growth

SKILLS & INTERESTS

- Technical Skills:** Rapid Prototyping, Python, JavaScript, AWS, Git, React, SQL, ROS, AR/VR development
- Project Management:** Agile, Scrum, Jira, Sprint planning, CI/CD pipelines, Kanban, Data Visualization, Wireframing