# Zebang Wu

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#### **OBJECTIVE**

Quantitative EIE major with strong coding/electronics/math/physics and AI research experience, pursuing high-quality internship or full-time opportunities to build products, improve operations, and understand end-to-end commercialization and growth.

### **EDUCATION**

Westlake University, School of Engineering, Hangzhou, Zhejiang, China Bachelor of Science, Electronic Information Engineering GPA: 4.04/4.3; TOEFL: 107/120

**Expected May 2027** 

Aug-Dec 2025

Cornell University, College of Engineering, Ithaca, NY

Exchange Student(Electrical & Computer Engineering)

Courses/activities concentrated in electronics, AI, HCI, operations/analytics/business.

## LEADERSHIP EXPERIENCE

College Student Union, Westlake University, President

Aug 2024-Aug 2025

- Organized six major campus events(30+ attendees each); produced official promotional videos
- Coordinated planning for routine union events and instituted biweekly reports and term-end summaries

#### RESEARCH EXPERIENCE

AI-Driven Inverse Design of Creep in Materials, Westlake University, Undergraduate Researcher Jul 2025-Present

- Learned ABAOUS for lattice-scale mechanics simulation
- Applied coupling constraint to enforce crystal-symmetry boundary conditions

VR-Assisted Teaching of Special Relativity Concepts, Cornell University, Research Assistant

Jul 2025-Present

- Verified key relativistic parameters used in the experimental design to ensure physical correctness
- Iterated instructional flow and interaction design in VR to improve student comprehension

Happiness of Deaf/Hard-of-Hearing Students, Westlake University, Lead Student Researcher May 2024-Present

- First-author qualitative project under faculty guidance
- Designed semi-structured interviews at a special-education college; transcribed and thematically coded data
- Conducted auxiliary interview across grassroots organizations, institutions, and local agencies
- Planned itinerary, coordinated interviews, and produced a comprehensive report
- Drafted manuscript (ready to submit to Journal of Happiness Studies)
- Received a first-tier scholarship

Semi-Supervised Error-Reduction Active Learning, Westlake University, Independent Researcher Feb-Jul 2025

- Targeted error-reduction as a promising active-learning direction
- Proposed a self-supervised approach to lower computational cost
- Implemented an MLP + toy transcendental-equation setup and observed improved training outcomes

Neural-Network-Based Adaptive Active Learning, Westlake University, Independent Researcher Dec 2024-Feb 2025

- Integrated active learning with neural operators via a NN + RL query function to reduce operator error
- Ran multiple training rounds and documented continual-learning and data-hunger challenges

**ASR Speech Recognition (Wav2Vec)**, Westlake University, *Undergraduate Researcher* 

Jul-Aug 2024

- Deployed and fine-tuned ASR tasks using the open-source Wav2Vec codebase
- Cleaned and relabeled SpeechLib data in Python to align with pretraining; achieved high recognition accuracy

Diffusion Model for Inverse Crystal Design, Westlake University, Undergraduate Researcher Dec 2023-Feb 2024

- Reviewed AI-for-materials literature; helped examine and optimize experimental pipelines
- Gained proficiency in Conda environment management, GitHub workflows, and SSH for remote training

# **CAMPUS INVOLVEMENT**

AI for Scientific Simulation & Discovery Lab, Westlake University, Research Assistant

Virtual Embodiment Lab, Cornell University, Research Assistant

College Cultural Construction Department, Westlake University, Section Chief

Student Ambassador, Westlake University, Member

Aug 2023-Present
Aug 2023-Aug 2024
Aug 2023-Aug 2024

### SPECIALIZED SKILLS

Programming: Python, PyTorch, C++, Verilog, HTML/CSS, Git, Conda, SSH, LaTeX, GitHub

Tools: PowerPoint, Excel, Word, Acrobat, Canva, Photoshop, Premiere Pro, After Effects, Feishu/Lark, KiCad, LTspice

**Languages:** Chinese (native); English (fluent)