

# 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

**Expected May 2027**

Bachelor of Science, Electronic Information Engineering

GPA: 4.04/4.3; TOEFL: 107/120

**Cornell University**, College of Engineering, Ithaca, NY

**Aug-Dec 2025**

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 ABAQUS 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*

**Aug 2023-Present**

**Virtual Embodiment Lab**, Cornell University, *Research Assistant*

**Aug 2025-Present**

**College Cultural Construction Department**, Westlake University, *Section Chief*

**Aug 2023-Aug 2024**

**Student Ambassador**, Westlake University, *Member*

**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)