To Prospective Students

If you are interested in a **research assistant position (Ph.D. students, research assistants, visiting students)** in my lab, please read the following carefully.

Self-Introduction

My name is **Huan Wang** (王欢, he/him/his), an incoming **Tenure-Track Assitant Professor** at [Westlake University](#) (Hangzhou, China), **principal investigator (PI) of ENCODE Lab** (Efficient Neural Computing and Design Lab). I earned my Ph.D. (2024) at Northeastern University (Boston, USA). Before that, I spent seven wonderful years at Zhejiang University (Hangzhou, China) to get my bachelor's and master's degrees. I mainly work on **Efficient AI.** I have collaborated closely with fantastic industrial researchers from Google, Snap, MERL, Meta, Alibaba, *etc*. Welcome to check my [webpage](#) for more information.

Lab Introduction

- **General background.** Westlake now has 4 schools. I am in the [School of Engineering](#), which has 6 programs. I am with the [Artificial Intelligence and Data Science (AI)](#) **program**. We are dedicated to achieving influential innovations in theories and applications of various AI sub-fields, aiming to cultivate the next generation of global leaders through inspiring research projects to motivate their professional development.
- **Research directions of the lab.** I am interested in a variety of topics in CV & ML, but at this point, the lab is most focused on **Efficient AI in various tasks (e.g., GenAI, 3D modeling, low-level vision)**, specifically,
    - typical efficient AI methods, such as network pruning, quantization, distillation, low-rank decomposition, efficient architecture design or search, *etc*;
    - text-to-image / video, LLM/MLLM, *etc*;
    - 3D neural rendering, avatars, animation, talking head or face, *etc*;
    - system design - how to design an effective efficiency portfolio that features optimizations in multiple axes like model architecture, data curation, and training strategy, with the consideration of hardware and system conditions.
    - (please refer to [my webpage](#) for more details of my past research directions.)
- **Advising style and lab culture.**
    - I am pretty **hands-on.** I'll regularly meet with students, have discussions, help write the paper, code (if you need), *etc*., especially for junior students.
    - Meanwhile, you will have **sufficient freedom** to develop your ideas and capabilities.
    - We value an **equal, chill, and creative** working environment. Essentially, we are colleagues at Westlake, working together to solve challenging problems.
- **What we can provide.**
    - **Research-oriented projects** with competitive compensations and a comfortable working environment.
    - We encourage students to do research-oriented **internships**. We will do our best to help find opportunities.

- We encourage students to **attend academic conferences** (either domestic or international), with reimbursements support.
- We have **sufficient GPUs** (A100 clusters of Westlake, lab-owned A6000, 4090, *etc.*). Also, we have collaborations w. industry, which also offers computing support.

Qualifications / What Kind of Students We Prefer

1. The prospective students are encouraged to be a "三好学生" ("Merit Students"), which is due to the beloved Dr. [Jian Sun](#) when he once gave a talk at Zhejiang University:
   - **Good at math** ("数学好") - Familiar with the fundamentals of ML (such as linear algebra, calculus, probability theory, statistics, *etc.*)
   - **Good at coding** ("编程好") - Strong coding ability with Python, C++ (CUDA programming). Proficient with deep learning platforms like PyTorch / TensorFlow. Familiar with typical deep learning backbones like resnets, transformers.
   - **With good attitude** ("态度好") - Good attitude, to me, mostly means
     - **You know why you are here** - Whether it is for dreams, grand research vision, or potential good job opportunities on the market, you *really* think it over and be committed to it.
     - You are **strongly motivated** to explore, hoping to contribute something valuable to the community. As a result, **never give up** when research setbacks happen to you (as they are quite often), and **always stay positive**[1].
     - You act on the **responsibility** to yourself and your colleagues.
2. (Top-tier) Publications are preferred, but not a must.

Openings

- Our lab plans to recruit **2~3 Ph.D. students for 2025 Fall**. One thing to note - **the Ph.D. degrees in AI conferred by Westlake currently are from Zhejiang University & Westlake University (浙大-西湖联培)**.
- Starting now, we have **many positions** for **research assistants and (paid) visiting students** (*esp.* for those who plan to join our lab). The expected visiting time is **usually 3 months (no less than 2 months at least)**, targeting submissions to top-tier conferences.

How to Apply?

- Send me an email[2] at wanghuan@westlake.edu.cn, attaching
  - **your CV** (including, if any, your webpage, Gitbub link, Google scholar, *etc.*),
  - **your transcripts**,
  - and **other materials** that you think can uniquely tell your story.
- We shall arrange an **online interview** (actually, it's a pretty chill chat) to see if it is a good match for us to work together. You shall present your research work, and I shall ask questions about it. After that, you will have the chance to ask me questions.
- It is advised to apply early as positions are limited. Looking forward to working together! :-)

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[1] Okay, being negative for a while is actually not that bad :-)
[2] Due to workload, please understand that I am not able to reply to every email.