ZIJUN WANG

Z zwang745@ucsc.edu · **%** asillycat.github.io · **♠** github.com/asillycat ·

EDUCATION

University of California, Santa Cruz, Santa Cruz, United States

2024.08 - Present

PhD student

Advised by Prof. Cihang Xie at VLAA LAB in Computer Science and Engineering Department

Research interest: AI Safety

Zhejiang University, Hangzhou, China

2020.09 - 2024.06

Bachelor of Engineering

Major in Computer Science and Technology, College of Computer Science and Technology

GPA: 3.92/4.00 **Credits:** 217.5 / 170.5

EXPERIENCE

Visiting Research Intern

Santa Cruz, CA

VLAA LAB, UC Santa Cruz 2023.08 – 2024.08

- Under Supervision of Prof. Cihang Xie and Prof. Yuyin Zhou
- Worked on Adversarial Attacks on LLMs & VLLMs
- One paper is in submission. [Paper] [Code]
- One co-authored paper is accepted by ECCV 2024. [Paper] [Code]
- Second Place in both base & large model subtracks of Red Teaming LLM@NeurIPS 2023, Torjan Detection Challenge(Team leader). [Code]

PUBLICATIONS

AttnGCG: Enhancing Adversarial Attacks on Language Models with Attention Manipulation

Zijun Wang, Haoqin Tu, Jieru Mei, Bingchen Zhao, Yisen Wang, Cihang Xie

TL;DR: This paper introduces an enhanced method that additionally manipulates models' attention scores to enhance the LLM jailbreaking. We term this novel strategy AttnGCG. Empirically, AttnGCG demonstrates consistent performance enhancements across diverse LLMs, with an average improvement of 7% in the Llama-2 series and 10% in the Gemma series. This strategy also exhibits robust attack transferability against both unseen harmful goals and black-box LLMs.

How Many Unicorns Are in This Image? A Safety Evaluation Benchmark for Vision LLMs

Haoqin Tu*, Chenhang Cui*, **Zijun Wang***, Yiyang Zhou, Bingchen Zhao, Junlin Han, Wangchunshu Zhou, Huaxiu Yao, Cihang Xie (* represents equal contribution)

Accepted by European Conference on Computer Vision (ECCV 2024)

TL;DR: This work focuses on the potential of VLLMs in visual reasoning. Different from prior studies, we shift our focus from evaluating standard performance to introducing a comprehensive safety evaluation suite, covering both out-of-distribution (OOD) generalization and adversarial robustness.

AWARDS

- Second Place in both base & large model subtracks of Red Teaming LLM@NeurIPS 2023, Torjan Detection Challenge(Team leader). [Code]
- National Scholarship (top 0.2% national-wide) issued by Ministry of Education of the People's Republic
 of China, 2021
- Provincial Government Scholarship (top 3%) of Zhejiang Province, 2023
- First-class Scholarship (top 3%) of Zhejiang University, 2021 & 2023