# TINGHAO XIE

# **EDUCATION**

#### **Princeton University**, Princeton, United States

08/2022 - Present

Ph.D. candidate, Electrical Computer Engineering (ECE)

• Advisor: Prof. Prateek Mittal

#### **Princeton University**, Princeton, United States

08/2022 - 09/2024

M.A., Electrical Computer Engineering (ECE)

# Zhejiang University, Zhejiang, China

09/2018 - 06/2022

B.E., Computer Science and Technology (CS)

• **GPA**: 3.99/4.00 (92.07/100)

• Rank: 1st/186

#### **RESEARCH INTERESTS**

Safe AI; Secure and Reliable AI Systems; Robust and Adversarial ML.

#### PUBLICATIONS & MANUSCRIPTS

## Red-teaming NSFW Image Classifiers with Generative AI Tools 🔀

**Tinghao Xie**, Yueqi Xie, Alireza Zareian, Shuming Hu, Felix Juefei-Xu, Xiaowen Lin, Ankit Jain, Prateek Mittal, Li Chen

Preprint (Under Review)

#### On Evaluating the Durability of Safeguards for Open-Weight LLMs 🔼 🕠

Xiangyu Qi\*, Boyi Wei\*, Nicholas Carlini, Yangsibo Huang, **Tinghao Xie**, Luxi He, Matthew Jagielski, Milad Nasr, Prateek Mittal, Peter Henderson *ICLR* 2025

# SORRY-Bench: Systematically Evaluating Large Language Model Safety Refusal Behaviors %, 🕒, 🛷

**Tinghao Xie\***, Xiangyu Qi\*, Yi Zeng\*, Yangsibo Huang\*, Udari Madhushani Sehwag, Kaixuan Huang, Luxi He, Boyi Wei, Dacheng Li, Ying Sheng, Ruoxi Jia, Bo Li, Kai Li, Danqi Chen, Peter Henderson, Prateek Mittal *ICLR* 2025

# Fantastic Copyrighted Beasts and How (Not) to Generate Them %, 🔼, 🥠

Luxi He\*, Yangsibo Huang\*, Weijia Shi\*, **Tinghao Xie**, Haotian Liu, Yue Wang, Luke Zettlemoyer, Chiyuan Zhang, Danqi Chen, Peter Henderson *ICLR* 2025

#### AI Risk Management Should Incorporate Both Safety and Security 🔁

Xiangyu Qi, Yangsibo Huang, Yi Zeng, Edoardo Debenedetti, Jonas Geiping, Luxi He, Kaixuan Huang, Udari Madhushani, Vikash Sehwag, Weijia Shi, Boyi Wei, **Tinghao Xie**, Danqi Chen, Pin-Yu Chen, Jeffrey Ding, Ruoxi Jia, Jiaqi Ma, Arvind Narayanan, Weijie J Su, Mengdi Wang, Chaowei Xiao, Bo Li, Dawn Song, Peter Henderson, Prateek Mittal

Preprint (Under Review)

# Assessing the brittleness of safety alignment via pruning and low-rank modifications %, 🔼, 🛷

Boyi Wei\*, Kaixuan Huang\*, Yangsibo Huang\*, **Tinghao Xie**, Xiangyu Qi, Mengzhou Xia, Prateek Mittal, Mengdi Wang, Peter Henderson

ICML 2024

# Fine-tuning Aligned Language Models Compromises Safety, Even When Users Do Not Intend To! %, 🔑, 🕩

Xiangyu Qi\*, Yi Zeng\*, **Tinghao Xie**\*, Pin-Yu Chen, Ruoxi Jia, Prateek Mittal<sup>†</sup>, Peter Henderson<sup>†</sup> *ICLR 2024 (Oral)* 

This work was exclusively reported by **B New York Times**, and covered by many other social medias!

# BaDExpert: Extracting Backdoor Functionality for Accurate Backdoor Input Detection [2],

**Tinghao Xie**, Xiangyu Qi, Ping He, Yiming Li, Jiachen T. Wang, Prateek Mittal *ICLR* 2024

# Towards A Proactive ML Approach for Detecting Backdoor Poison Samples %, 🖺, 🕠

Xiangyu Qi, **Tinghao Xie**, Jiachen T. Wang, Tong Wu, Saeed Mahloujifar, Prateek Mittal *USENIX Security Symposium 2023* 

## Revisiting the Assumption of Latent Separability for Backdoor Defenses %, 🔼 🕠

Xiangyu Qi\*, **Tinghao Xie\***, Yiming Li, Saeed Mahloujifar, Prateek Mittal *ICLR 2023* 

# Towards Practical Deployment-Stage Backdoor Attack on Deep Neural Networks %, 🔼 🕠

Xiangyu Qi\*, **Tinghao Xie**\*, Ruizhe Pan, Jifeng Zhu, Yong Yang and Kai Bu *CVPR 2022 (Oral)* 

# **WORK EXPERIENCE**

#### Meta GenAI (Media Safety Team), Menlo Park, United States

05/2024 - 08/2024

Research Intern

- Mentor: Li Chen
- Project: Red-teaming NSFW Image Classifiers and Text-to-Image System Safety

# ♥ Honors and Awards

Francis Robbins Upton Fellowship	08/2022
Outstanding Graduate Thesis	06/2022
Champion of Zhejiang University Bodybuilding Competition (70kg Level)	05/2022
Elite Liu Yongling Scholarship (1/802)	2020 - 2021
Tencent Scholarship (5/802)	2020 - 2021
The 2nd Class Prize in ASC 20-21 Student Supercomputer Challenge	01/2021
Narada Scholarship (1/372)	2019 - 2020
Champion of Zhejiang University DFM Hip-hop Crew Battle	2019

## **SERVICES**

*Reviewing* for CVPR 2025, ICML 2024, ICLR 2025, ICLR 2024 Set LLM Workshop, Neurips 2024, Neurips 2023 (*Top Reviewer*), Neurips 2023 BUGS Workshop.

#### SKILLS

- Programming: C/C++, Python, JavaScript, CUDA, Verilog, Shell, MATLAB, ActionScript, HTML.
- **Software**: LATEX, Vivado, Adobe {Photoshop, Premiere Pro, After Effects, Audition}.
- Languages known: English(fluent), Chinese(native), Cantonese(native).
- Hobbies: Climbing, Skiing, Dance (Hip-hop, House, etc.), Power Lifting, Swimming, Basketball, Billiards.

Latest update date: 03/05/2025