# **Wenxiao Wang**

wwx@umd.edu | PhD student at UMD

Education	
University of Maryland, College Park	College Park, US
Ph.D. IN COMPUTER SCIENCE	Sept. 2021 - present

### Institute for Interdisciplinary Information Sciences, Tsinghua University

B.Eng. in Computer Science and Technology.

Sept. 2016 - June. 2020

Peking, China

Peking, China

Berkeley, US

2021

### Research

**Bytedance**Remote, US

RESEARCH INTERN MENTORED BY LINJIE YANG, HENG WANG AND YU TIAN

June. 2022 - Nov. 2022

self-supervised pre-training of visual models

Institute for Interdisciplinary Information Sciences, Tsinghua University

RESEARCH ASSISTANT MENTORED BY PROF. HANG ZHAO

Sep. 2020 - Aug. 2021

self-supervised learning

University of California, Berkeley

 VISITING STUDENT RESEARCHER ADVISED BY PROF. Dawn Song
 Apr. 2019 - Aug. 2019

 watermarking of neural networks & differentially private deep learning

Bytedance AI Lab

Intern in visual search group mentored by Yi He and Lei Li

deep representation learning for large scale near duplicate video retrieval

### **Publications**

### **Lethal Dose Conjecture on Data Poisoning [url]**

WENXIAO WANG, ALEXANDER LEVINE, SOHEIL FEIZI

Conference on Neural Information Processing Systems (NeurIPS)

# Improved Certified Defenses against Data Poisoning with (Deterministic) Finite Aggregation [url]

WENXIAO WANG, ALEXANDER LEVINE, SOHEIL FEIZI

International Conference on Machine Learning (ICML)

#### On Feature Decorrelation in Self-Supervised Learning [url]

TIANYU HUA\*, **WENXIAO WANG**\*, ZIHUI XUE, SUCHENG REN, YUE WANG, HANG ZHAO (\*EQUAL CONTRIBUTION)

International Conference on Computer Vision (ICCV)[oral]

### DPlis: Boosting Utility of Differentially Private Deep Learning via Randomized Smoothing [url]

**WENXIAO WANG**, TIANHAO WANG, LUN WANG, NANQING LUO, PAN ZHOU, DAWN SONG, RUOXI JIA Privacy Enhancing Technologies Symposium (PETS)

2021

### REFIT: A Unified Watermark Removal Framework For Deep Learning Systems With Limited Data [url]

Xinyun Chen\*,  $\mathbf{Wenxiao}$   $\mathbf{Wang}$ \*, Yiming Ding, Chris Bender, Ruoxi Jia, Bo Li, Dawn Song (\*Equal contribution)

2021

ACM Asia Conference on Computer and Communications Security (AsiaCCS)

## The Secret Revealer: Generative Model Inversion Attacks Against Deep Neural Networks [url]

Yuheng Zhang\*, Ruoxi Jia\*, Hengzhi Pei, **Wenxiao Wang**, Bo Li, Dawn Song (\*Equal contribution)

Conference on Computer Vision and Pattern Recognition (CVPR)[oral]

2020

#### Leveraging Unlabeled Data for Watermark Removal of Deep Neural Networks [url]

Xinyun Chen\*, **Wenxiao Wang**\*, Yiming Ding, Chris Bender, Ruoxi Jia, Bo Li, Dawn Song (\*Equal contribution)

2019

ICML2019 Workshop on Security and Privacy of Machine Learning

### Talks \_\_\_\_\_

• Lethal Dose Conjecture: From Few-shot Learning to Potentially Nearly Optimal Defenses against Data Poisoning, TMLR Group, Hong Kong Baptist University, December 2022.

### **Services**

Program Committee / Reviewer of:

- TPAMI
- NeurIPS 2022
- ICML 2022 (Outstanding Reviewer)
- Workshop on Adversarial Robustness In the Real World (ECCV 2022, ICCV 2021)
- Workshop on Socially Responsible Machine Learning (ICML 2021)
- Workshop on Adversarial Machine Learning in Real-World Computer Vision Systems and Online Challenges (CVPR 2021)
- Workshop on Security and Safety in Machine Learning Systems (ICLR 2021)

### Awards\_\_\_\_\_

Gold Medal(4th place)	National Olympiad in Informatics	2015
Gold Medal(1st place)	Asia and Pacific Informatics Olympiad in China District	2015
Gold Medal(10th place)	China Team Selection Competition	2015
Gold Medal	National Olympiad in Informatics	2014
Bronze Medal	Asia and Pacific Informatics Olympiad in China District	2014
Silver Medal	China Team Selection Competition	2014