

Yang Zhang | CV

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Employment

CISPA Helmholtz Center for Information Security <i>Tenured Faculty, equivalent to full professor</i>	Saarbrücken, Germany 5/2023 -
CISPA Helmholtz Center for Information Security <i>Tenure-Track Faculty</i>	Saarbrücken, Germany 2/2020 - 4/2023
CISPA Helmholtz Center for Information Security <i>Research Group Leader</i>	Saarbrücken, Germany 1/2019 - 1/2020
CISPA, Saarland University <i>Postdoctoral Researcher</i>	Saarbrücken, Germany 1/2017 - 12/2018

Education

University of Luxembourg <i>Ph.D. in Computer Science, highest honor</i>	Luxembourg, Luxembourg 12/2012 - 11/2016
Shandong University <i>Master in Computer Science</i>	Jinan, China 9/2009 - 6/2012
University of Luxembourg <i>Master in Informatics, exchange student</i>	Luxembourg, Luxembourg 9/2010 - 10/2011
Shandong University <i>Bachelor in Software Engineering</i>	Jinan, China 9/2005 - 6/2009

Research Interests

- Trustworthy Machine Learning (Safety, Privacy, and Security)
- Misinformation, Hate Speech, and Memes
- Social Network Analysis

Awards

- AI 2000 Most Influential Scholar Award Honorable Mention 2025
- Best Machine Learning and Security Paper in Cybersecurity Award 2025
- Best paper finalist at CSAW Europe 2024
- Best paper finalist at CSAW Europe 2023
- Best paper award honorable mention at CCS 2022
- Busy Beaver teaching award nomination for seminar "Privacy of Machine Learning" at Saarland University (2022 Winter)
- Busy Beaver teaching award nomination for advanced lecture "Machine Learning Privacy" at Saarland University (2022 Summer)

- Busy Beaver teaching award for seminar “Privacy of Machine Learning” at Saarland University (2021 Winter)
- Distinguished paper award at NDSS 2019

Publication

My publication list can also be found at DBLP and Google Scholar; however, they may not be up to date.

Conference.....

- [1] Boyang Zhang and Istemi Ekin Akkus and Ruichuan Chen and Alice Dethise and Klaus Satzke and Ivica Rimac and **Yang Zhang**. Defeating Cerberus: Privacy-Leakage Mitigation in Vision Language Models. In *Findings of the Association for Computational Linguistics: EACL (EACL Findings)*. ACL, 2026.
- [2] Hanwei Zhang and Luo Cheng and Rui Wen and **Yang Zhang** and Lijun Zhang and Holger Hermanns. SL-CBM: Enhancing Concept Bottleneck Models with Semantic Locality for Better Interpretability. In *AAAI Conference on Artificial Intelligence (AAAI)*. AAAI, 2026.
- [3] Yukun Jiang and Mingjie Li and Michael Backes and **Yang Zhang**. Adjacent Words, Divergent Intent: Jailbreaking Large Language Models via Task Concurrency. In *Annual Conference on Neural Information Processing Systems (NeurIPS)*. NeurIPS, 2025.
- [4] Mingjie Li and Wai Man Si and Michael Backes and **Yang Zhang** and Yisen Wang. Finding and Reactivating Post-Trained LLMs’ Hidden Safety Mechanisms. In *Annual Conference on Neural Information Processing Systems (NeurIPS)*. NeurIPS, 2025.
- [5] Boyang Zhang and Yicong Tan and Yun Shen and Ahmed Salem and Michael Backes and Savvas Zannettou and **Yang Zhang**. Breaking Agents: Compromising Autonomous LLM Agents Through Malfunction Amplification. In *Conference on Empirical Methods in Natural Language Processing (EMNLP)*. ACL, 2025.
- [6] Yiting Qu and Ziqing Yang and Yihan Ma and Michael Backes and Savvas Zannettou and **Yang Zhang**. Hate in Plain Sight: On the Risks of Moderating AI-Generated Hateful Illusions. In *IEEE International Conference on Computer Vision (ICCV)*. IEEE, 2025.
- [7] Yiting Qu and Xinyue Shen and Yixin Wu and Michael Backes and Savvas Zannettou and **Yang Zhang**. UnsafeBench: Benchmarking Image Safety Classifiers on Real-World and AI-Generated Images. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 3221–3235. ACM, 2025.
- [8] Yiting Qu and Michael Backes and **Yang Zhang**. Bridging the Gap in Vision Language Models in Identifying Unsafe Concepts Across Modalities. In *USENIX Security Symposium (USENIX Security)*, pages 957–976. USENIX, 2025.
- [9] Rui Wen and Yiyong Liu and Michael Backes and **Yang Zhang**. SoK: Data Reconstruction Attacks Against Machine Learning Models: Definition, Metrics, and Benchmark. In *USENIX Security Symposium (USENIX Security)*, pages 5601–5620. USENIX, 2025.
- [10] Xinyue Shen and Yixin Wu and Yiting Qu and Michael Backes and Savvas Zannettou and **Yang Zhang**. HateBench: Benchmarking Hate Speech Detectors on LLM-Generated Content and Hate Campaigns. In *USENIX Security Symposium (USENIX Security)*, pages 221–240. USENIX, 2025.
- [11] Yihan Ma and Xinyue Shen and Yiting Qu and Ning Yu and Michael Backes and Savvas Zannettou and **Yang Zhang**. From Meme to Threat: On the Hateful Meme Understanding and Induced Hateful Content Generation in Open-Source Vision Language Models. In *USENIX Security Symposium (USENIX Security)*, pages 4703–4722. USENIX, 2025.
- [12] Yixin Wu and Ning Yu and Michael Backes and Yun Shen and **Yang Zhang**. On the Proactive Generation of Unsafe Images From Text-To-Image Models Using Benign Prompts. In *USENIX Security Symposium (USENIX Security)*, pages 917–936. USENIX, 2025.

- [13] Yixin Wu and Ziqing Yang and Yun Shen and Michael Backes and **Yang Zhang**. Synthetic Artifact Auditing: Tracing LLM-Generated Synthetic Data Usage in Downstream Applications. In *USENIX Security Symposium (USENIX Security)*, pages 1689–1708. USENIX, 2025.
- [14] Dayong Ye and Tianqing Zhu and Shang Wang and Bo Liu and Leo Yu Zhang and Wanlei Zhou and **Yang Zhang**. Data-Free Model-Related Attacks: Unleashing the Potential of Generative AI. In *USENIX Security Symposium (USENIX Security)*, pages 1709–1727. USENIX, 2025.
- [15] Dayong Ye and Tianqing Zhu and Jiayang Li and Kun Gao and Bo Liu and Leo Yu Zhang and Wanlei Zhou and **Yang Zhang**. Data Duplication: A Novel Multi-Purpose Attack Paradigm in Machine Unlearning. In *USENIX Security Symposium (USENIX Security)*, pages 6399–6418. USENIX, 2025.
- [16] Hao Li and Zheng Li and Siyuan Wu and Yutong Ye and Min Zhang and Dengguo Feng and **Yang Zhang**. Enhanced Label-Only Membership Inference Attacks with Fewer Queries. In *USENIX Security Symposium (USENIX Security)*, pages 5465–5483. USENIX, 2025.
- [17] Yuke Hu and Zheng Li and Zhihao Liu and **Yang Zhang** and Zhan Qin and Kui Ren and Chun Chen. Membership Inference Attacks Against Vision-Language Models. In *USENIX Security Symposium (USENIX Security)*, pages 1589–1608. USENIX, 2025.
- [18] Atilla Akkus and Masoud Poorghaffar Aghdam and Mingjie Li and Junjie Chu and Michael Backes and **Yang Zhang** and Sinem Sav. Generated Data with Fake Privacy: Hidden Dangers of Fine-tuning Large Language Models on Generated Data. In *USENIX Security Symposium (USENIX Security)*, pages 8075–8093. USENIX, 2025.
- [19] Yule Liu and Zhiyuan Zhong and Yifan Liao and Zhen Sun and Jingyi Zheng and Jiaheng Wei and Qingyuan Gong and Fenghua Tong and Yang Chen and **Yang Zhang** and Xinlei He. On the Generalization Ability of Machine-Generated Text Detectors. In *ACM Conference on Knowledge Discovery and Data Mining (KDD)*, pages 5674–5685. ACM, 2025.
- [20] Junjie Chu and Yugeng Liu and Ziqing Yang and Xinyue Shen and Michael Backes and **Yang Zhang**. JailbreakRadar: Comprehensive Assessment of Jailbreak Attacks Against LLMs. In *Annual Meeting of the Association for Computational Linguistics (ACL)*, pages 21538–21566. ACL, 2025.
- [21] Xinyue Shen and Yun Shen and Michael Backes and **Yang Zhang**. When GPT Spills the Tea: Comprehensive Assessment of Knowledge File Leakage in GPTs. In *Annual Meeting of the Association for Computational Linguistics (ACL)*, pages 19096–19111. ACL, 2025.
- [22] Zhen Sun and Zongmin Zhang and Xinyue Shen and Ziyi Zhang and Yule Liu and Michael Backes and **Yang Zhang** and Xinlei He. Are We in the AI-Generated Text World Already? Quantifying and Monitoring AIGT on Social Media. In *Annual Meeting of the Association for Computational Linguistics (ACL)*, pages 22975–23005. ACL, 2025.
- [23] Rui Zhang and Yun Shen and Hongwei Li and Wenbo Jiang and Hanxiao Chen and Yuan Zhang and Guowen Xu and **Yang Zhang**. The Ripple Effect: On Unforeseen Complications of Backdoor Attacks. In *International Conference on Machine Learning (ICML)*. PMLR, 2025.
- [24] Junjie Chu and Yugeng Liu and Xinlei He and Michael Backes and **Yang Zhang** and Ahmed Salem. Neeko: Model Hijacking Attacks Against Generative Adversarial Networks. In *IEEE International Conference on Multimedia and Expo (ICME)*. IEEE, 2025.
- [25] Xinyue Shen and Yun Shen and Michael Backes and Yang Zhang. GPTracker: A Large-Scale Measurement of Misused GPTs. In *IEEE Symposium on Security and Privacy (S&P)*, pages 317–335. IEEE, 2025n.
- [26] Yicong Tan and Xinyue Shen and Yun Shen and Michael Backes and **Yang Zhang**. On the Effectiveness of Prompt Stealing Attacks on In-The-Wild Prompts. In *IEEE Symposium on Security and Privacy (S&P)*, pages 355–373. IEEE, 2025.
- [27] Mingjie Li and Wai Man Si and Michael Backes and **Yang Zhang** and Yisen Wang. SaLoRA: Safety-Alignment Preserved Low-Rank Adaptation. In *International Conference on Learning Representations (ICLR)*, 2025.

- [28] Yan Pang and Aiping Xiong and **Yang Zhang** and Tianhao Wang. Towards Understanding Unsafe Video Generation. In *Network and Distributed System Security Symposium (NDSS)*. Internet Society, 2025.
- [29] Rui Wen and Michael Backes and **Yang Zhang**. Understanding Data Importance in Machine Learning Attacks: Does Valuable Data Pose Greater Harm? In *Network and Distributed System Security Symposium (NDSS)*. Internet Society, 2025.
- [30] Yihan Ma and Xinyue Shen and Yixin Wu and Boyang Zhang and Michael Backes and **Yang Zhang**. The Death and Life of Great Prompts: Analyzing the Evolution of LLM Prompts from the Structural Perspective. In *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 21990–22001. ACL, 2024.
- [31] Yukun Jiang and Zheng Li and Xinyue Shen and Yugeng Liu and Michael Backes and **Yang Zhang**. ModScan: Measuring Stereotypical Bias in Large Vision-Language Models from Vision and Language Modalities. In *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 12814–12845. ACL, 2024.
- [32] Junjie Chu and Zeyang Sha and Michael Backes and **Yang Zhang**. Reconstruct Your Previous Conversations! Comprehensively Investigating Privacy Leakage Risks in Conversations with GPT Models. In *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 6584–6600. ACL, 2024.
- [33] Rui Wen and Zheng Li and Michael Backes and **Yang Zhang**. Membership Inference Attacks Against In-Context Learning. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 3481–3495. ACM, 2024.
- [34] Yixin Wu and Yun Shen and Michael Backes and **Yang Zhang**. Image-Perfect Imperfections: Safety, Bias, and Authenticity in the Shadow of Text-To-Image Model Evolution. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 4837–4851. ACM, 2024.
- [35] Jinghuai Zhang and Jianfeng Chi and Zheng Li and Kunlin Cai and **Yang Zhang** and Yuan Tian. BadMerging: Backdoor Attacks Against Model Merging. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 4450–4464. ACM, 2024.
- [36] Zeyang Sha and Yicong Tan and Mingle Li and Michael Backes and **Yang Zhang**. ZeroFake: Zero-Shot Detection of Fake Images Generated and Edited by Text-to-Image Generation Models. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 4852–4866. ACM, 2024.
- [37] Hao Li and Zheng Li and Siyuan Wu and Chengrui Hu and Yutong Ye and Min Zhang and Dengguo Feng and **Yang Zhang**. SeqMIA: Sequential-Metric Based Membership Inference Attack. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 3496–3510. ACM, 2024.
- [38] Xinlei He and Xinyue Shen and Zeyuan Chen and Michael Backes and **Yang Zhang**. MGTBench: Benchmarking Machine-Generated Text Detection. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 2251–2265. ACM, 2024.
- [39] Xinyue Shen and Zeyuan Chen and Michael Backes and Yun Shen and **Yang Zhang**. “Do Anything Now”: Characterizing and Evaluating In-The-Wild Jailbreak Prompts on Large Language Models. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 1671–1685. ACM, 2024.
- [40] Rui Zhang and Hongwei Li and Rui Wen and Wenbo Jiang and Yuan Zhang and Michael Backes and Yun Shen and **Yang Zhang**. Instruction Backdoor Attacks Against Customized LLMs. In *USENIX Security Symposium (USENIX Security)*. USENIX, 2024.
- [41] Xinyue Shen and Yiting Qu and Michael Backes and **Yang Zhang**. Prompt Stealing Attacks Against Text-to-Image Generation Models. In *USENIX Security Symposium (USENIX Security)*. USENIX, 2024.
- [42] Boyang Zhang and Zheng Li and Ziqing Yang and Xinlei He and Michael Backes and Mario Fritz and **Yang Zhang**. SecurityNet: Assessing Machine Learning Vulnerabilities on Public Models. In *USENIX Security Symposium (USENIX Security)*. USENIX, 2024.

- [43] Yixin Wu and Rui Wen and Michael Backes and Pascal Berrang and Mathias Humbert and Yun Shen and **Yang Zhang**. Quantifying Privacy Risks of Prompts in Visual Prompt Learning. In *USENIX Security Symposium (USENIX Security)*. USENIX, 2024.
- [44] Hai Huang and Zhengyu Zhao and Michael Backes and Yun Shen and **Yang Zhang**. Composite Backdoor Attacks Against Large Language Models. In *Findings of the Association for Computational Linguistics: NAACL (NAACL Findings)*. ACL, 2024.
- [45] Yukun Jiang and Xinyue Shen and Rui Wen and Zeyang Sha and Junjie Chu and Yugeng Liu and Michael Backes and **Yang Zhang**. Games and Beyond: Analyzing the Bullet Chats of Esports Livestreaming. In *International Conference on Weblogs and Social Media (ICWSM)*, pages 761–773. AAAI, 2024.
- [46] Yiting Qu and Zhikun Zhang and Yun Shen and Michael Backes and **Yang Zhang**. FAKEPCD: Fake Point Cloud Detection via Source Attribution. In *ACM Asia Conference on Computer and Communications Security (ASIACCS)*, pages 930–946. ACM, 2024.
- [47] Xinlei He and Savvas Zannettou and Yun Shen and **Yang Zhang**. You Only Prompt Once: On the Capabilities of Prompt Learning on Large Language Models to Tackle Toxic Content. In *IEEE Symposium on Security and Privacy (S&P)*, pages 770–787. IEEE, 2024.
- [48] Tianshuo Cong and Xinlei He and Yun Shen and **Yang Zhang**. Test-Time Poisoning Attacks Against Test-Time Adaptation Models. In *IEEE Symposium on Security and Privacy (S&P)*, pages 1306–1324. IEEE, 2024.
- [49] Minxing Zhang and Ning Yu and Rui Wen and Michael Backes and **Yang Zhang**. Generated Distributions Are All You Need for Membership Inference Attacks Against Generative Models. In *IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)*. IEEE, 2024.
- [50] Zeyang Sha and Zheng Li and Ning Yu and **Yang Zhang**. DE-FAKE: Detection and Attribution of Fake Images Generated by Text-to-Image Generation Models. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 3418–3432. ACM, 2023.
- [51] Yiting Qu and Xinyue Shen and Xinlei He and Michael Backes and Savvas Zannettou and **Yang Zhang**. Unsafe Diffusion: On the Generation of Unsafe Images and Hateful Memes From Text-To-Image Models. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 3403–3417. ACM, 2023.
- [52] Joann Qiongna Chen and Tianhao Wang and Zhikun Zhang and **Yang Zhang** and Somesh Jha and Zhou Li. Differentially Private Resource Allocation. In *Annual Computer Security Applications Conference (ACSAC)*, pages 772–786. ACM, 2023.
- [53] Boyang Zhang and Xinlei He and Yun Shen and Tianhao Wang and **Yang Zhang**. A Plot is Worth a Thousand Words: Model Information Stealing Attacks via Scientific Plots. In *USENIX Security Symposium (USENIX Security)*, pages 5289–5306. USENIX, 2023.
- [54] Wai Man Si and Michael Backes and **Yang Zhang** and Ahmed Salem. Two-in-One: A Model Hijacking Attack Against Text Generation Models. In *USENIX Security Symposium (USENIX Security)*, pages 2223–2240. USENIX, 2023.
- [55] Zheng Li and Ning Yu and Ahmed Salem and Michael Backes and Mario Fritz and **Yang Zhang**. UnGANable: Defending Against GAN-based Face Manipulation. In *USENIX Security Symposium (USENIX Security)*, pages 7213–7230. USENIX, 2023.
- [56] Min Chen and Zhikun Zhang and Michael Backes and Tianhao Wang and **Yang Zhang**. FACE-AUDITOR: Data Auditing in Facial Recognition Systems. In *USENIX Security Symposium (USENIX Security)*, pages 7195–7212. USENIX, 2023.
- [57] Haiming Wang and Zhikun Zhang and Tianhao Wang and Shibo He and Michael Backes and Jiming Chen and **Yang Zhang**. PrivTrace: Differentially Private Trajectory Synthesis by Adaptive Markov Model. In *USENIX Security Symposium (USENIX Security)*, pages 1649–1666. USENIX, 2023.

- [58] Yihan Ma and Zhikun Zhang and Ning Yu and Xinlei He and Michael Backes and Yun Shen and **Yang Zhang**. Generated Graph Detection. In *International Conference on Machine Learning (ICML)*, pages 23412–23428. PMLR, 2023.
- [59] Ziqing Yang and Xinlei He and Zheng Li and Michael Backes and Mathias Humbert and Pascal Berrang and **Yang Zhang**. Data Poisoning Attacks Against Multimodal Encoders. In *International Conference on Machine Learning (ICML)*, pages 39299–39313. PMLR, 2023.
- [60] Kai Mei and Zheng Li and Zhenting Wang and **Yang Zhang** and Shiqing Ma. NOTABLE: Transferable Backdoor Attacks Against Prompt-based NLP Models. In *Annual Meeting of the Association for Computational Linguistics (ACL)*, pages 15551–15565. ACL, 2023.
- [61] Zeyang Sha and Xinlei He and Ning Yu and Michael Backes and **Yang Zhang**. Can't Steal? Cont-Steal! Contrastive Stealing Attacks Against Image Encoders. In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, pages 16373–16383. IEEE, 2023.
- [62] Yiting Qu and Xinlei He and Shannon Pierson and Michael Backes and **Yang Zhang** and Savvas Zannettou. On the Evolution of (Hateful) Memes by Means of Multimodal Contrastive Learning. In *IEEE Symposium on Security and Privacy (S&P)*, pages 293–310. IEEE, 2023.
- [63] Rui Wen and Zhengyu Zhao and Zhuoran Liu and Michael Backes and Tianhao Wang and **Yang Zhang**. Is Adversarial Training Really a Silver Bullet for Mitigating Data Poisoning? In *International Conference on Learning Representations (ICLR)*, 2023.
- [64] Yugeng Liu and Zheng Li and Michael Backes and Yun Shen and **Yang Zhang**. Backdoor Attacks Against Dataset Distillation. In *Network and Distributed System Security Symposium (NDSS)*. Internet Society, 2023.
- [65] Xiaojian Yuan and Kejiang Chen and Jie Zhang and Weiming Zhang and Nenghai Yu and **Yang Zhang**. Pseudo Label-Guided Model Inversion Attack via Conditional Generative Adversarial Network. In *AAAI Conference on Artificial Intelligence (AAAI)*, pages 3349–3357. AAAI, 2023.
- [66] Yufei Chen and Chao Shen and Yun Shen and Cong Wang and **Yang Zhang**. Amplifying Membership Exposure via Data Poisoning. In *Annual Conference on Neural Information Processing Systems (NeurIPS)*. NeurIPS, 2022.
- [67] Wai Man Si and Michael Backes and Jeremy Blackburn and Emiliano De Cristofaro and Gianluca Stringhini and Savvas Zannettou and **Yang Zhang**. Why So Toxic?: Measuring and Triggering Toxic Behavior in Open-Domain Chatbots. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 2659–2673. ACM, 2022.
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- [69] Yiyong Liu and Zhengyu Zhao and Michael Backes and **Yang Zhang**. Membership Inference Attacks by Exploiting Loss Trajectory. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 2085–2098. ACM, 2022.
- [70] Zheng Li and Yiyong Liu and Xinlei He and Ning Yu and Michael Backes and **Yang Zhang**. Auditing Membership Leakages of Multi-Exit Networks. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 1917–1931. ACM, 2022.
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- [73] Yun Shen and Yufei Han and Zhikun Zhang and Min Chen and Ting Yu and Michael Backes and **Yang Zhang** and Gianluca Stringhini. Finding MNEMON: Reviving Memories of Node Embeddings. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 2643–2657. ACM, 2022.
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- [75] Yugeng Liu and Rui Wen and Xinlei He and Ahmed Salem and Zhikun Zhang and Michael Backes and Emiliano De Cristofaro and Mario Fritz and **Yang Zhang**. ML-Doctor: Holistic Risk Assessment of Inference Attacks Against Machine Learning Models. In *USENIX Security Symposium (USENIX Security)*, pages 4525–4542. USENIX, 2022.
- [76] Yufei Chen and Chao Shen and Cong Wang and **Yang Zhang**. Teacher Model Fingerprinting Attacks Against Transfer Learning. In *USENIX Security Symposium (USENIX Security)*, pages 3593–3610. USENIX, 2022.
- [77] Zhikun Zhang and Min Chen and Michael Backes and Yun Shen and **Yang Zhang**. Inference Attacks Against Graph Neural Networks. In *USENIX Security Symposium (USENIX Security)*, pages 4543–4560. USENIX, 2022.
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- [80] Ahmed Salem and Rui Wen and Michael Backes and Shiqing Ma and **Yang Zhang**. Dynamic Backdoor Attacks Against Machine Learning Models. In *IEEE European Symposium on Security and Privacy (Euro S&P)*, pages 703–718. IEEE, 2022.
- [81] Ahmed Salem and Michael Backes and **Yang Zhang**. Get a Model! Model Hijacking Attack Against Machine Learning Models. In *Network and Distributed System Security Symposium (NDSS)*. Internet Society, 2022.
- [82] Junhao Zhou and Yufei Chen and Chao Shen and **Yang Zhang**. Property Inference Attacks Against GANs. In *Network and Distributed System Security Symposium (NDSS)*. Internet Society, 2022.
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- [84] Min Chen and Zhikun Zhang and Tianhao Wang and Michael Backes and Mathias Humbert and **Yang Zhang**. When Machine Unlearning Jeopardizes Privacy. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 896–911. ACM, 2021.
- [85] Minxing Zhang and Zhaochun Ren and Zihan Wang and Pengjie Ren and Zhumin Chen and Pengfei Hu and **Yang Zhang**. Membership Inference Attacks Against Recommender Systems. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 864–879. ACM, 2021.
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- [91] Rui Wen and Yu Yu and Xiang Xie and **Yang Zhang**. LEAF: A Faster Secure Search Algorithm via Localization, Extraction, and Reconstruction. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 1219–1232. ACM, 2020.
- [92] Dingfan Chen and Ning Yu and **Yang Zhang** and Mario Fritz. GAN-Leaks: A Taxonomy of Membership Inference Attacks against Generative Models. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 343–362. ACM, 2020.
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- [96] Jinyuan Jia and Ahmed Salem and Michael Backes and **Yang Zhang** and Neil Zhenqiang Gong. MemGuard: Defending against Black-Box Membership Inference Attacks via Adversarial Examples. In *ACM SIGSAC Conference on Computer and Communications Security (CCS)*, pages 259–274. ACM, 2019.
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Journal

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TrustAIRLab

Our lab is fully committed to open science, which led to the establishment of TrustAIRLab.

- Much of the code developed by our lab is accessible through our GitHub organization
- A curated selection of datasets collected by our lab can be found on our Hugging Face organization and our Zenodo community

Teaching

- 2025 Winter, Seminar: AI Safety
- 2025 Summer, Advanced Lecture: Attacks Against Machine Learning Models
- 2025 Summer, Seminar: Data-driven Understanding of the Disinformation Epidemic
- 2024 Winter, Seminar: Privacy of Machine Learning
- 2024 Summer, Advanced Lecture: Attacks Against Machine Learning Models
- 2024 Summer, Seminar: Data-driven Understanding of the Disinformation Epidemic
- 2023 Winter, Seminar: Privacy of Machine Learning
- 2023 Summer, Advanced Lecture: Attacks Against Machine Learning Models
- 2023 Summer, Seminar: Data-driven Understanding of the Disinformation Epidemic
- 2022 Winter, Seminar: Privacy of Machine Learning
- 2022 Summer, Advanced Lecture: Machine Learning Privacy
- 2022 Summer, Seminar: Data-driven Understanding of the Disinformation Epidemic
- 2021 Winter, Seminar: Privacy of Machine Learning
- 2021 Summer, Advanced Lecture: Privacy Enhancing Technologies

- 2021 Summer, Seminar: Data-driven Understanding of the Disinformation Epidemic
- 2020 Winter, Seminar: Data Privacy
- 2020 Summer, Advanced Lecture: Privacy Enhancing Technologies
- 2020 Summer, Seminar: Data-driven Approaches on Understanding Disinformation
- 2019 Winter, Seminar: Data Privacy
- 2019 Summer, Advanced Lecture: Privacy Enhancing Technologies
- 2019 Summer, Seminar: Biomedical Privacy
- 2018 Winter, Seminar: Data Privacy
- 2018 Summer, Advanced Lecture: Privacy Enhancing Technologies
- 2018 Summer, Seminar: Adversarial Machine Learning

Students

Postdoc

Yiting Qu	11/2025 -
Zihan Wang	11/2025 -
Mingjie Li	10/2023 -

Ph.D. Students

Yage Zhang	8/2025 -
Bo Shao	5/2025 -
Mengfei Liang	5/2025 -
Zeyuan Chen	3/2025 -
Ye Leng	10/2024 -
Yukun Jiang	6/2024 -
Chi Cui	4/2024 -
Yicong Tan	4/2024 -
Junjie Chu	11/2022 -
Yixin Wu	11/2022 -

(MLCommons ML and Systems Rising Star 2025, Abbe Grant 2025, Rising Stars in EECS 2025)

Ziqing Yang	11/2022 -
Xinyue Shen (Abbe Grant 2024, KAUST Rising Star in AI 2025, MLCommons ML and Systems Rising Star 2025)	10/2022 -
Yugeng Liu	1/2022 -
Boyang Zhang	12/2021 -
Hai Huang	11/2021 -
Wai Man Si	11/2021 -
Yihan Ma	7/2021 -
Ph.D. Preparatory Phase	
Tianze Chang	5/2025 -
Xinyu Zhang	10/2024 -
Alumni	
Chia-Yi Hsu <i>visiting Ph.D. student from National Yang Ming Chiao Tung University</i>	12/2024 - 9/2025
Rui Wen <i>Ph.D. Student</i> <i>now assistant professor at Institute of Science Tokyo</i>	10/2021 - 4/2025
Yuke Hu <i>visiting Ph.D. student from Zhejiang University</i>	5/2024 - 12/2024
Zeyang Sha <i>Ph.D. Student</i> <i>now senior algorithmic engineer at Ant Financial (Ant Star)</i>	3/2023 - 11/2024
Zheng Li <i>Ph.D. Student</i> <i>now full professor at Shandong University</i> (ERCIM WG STM Best Ph.D. Thesis Award 2024)	2/2021 - 10/2023
Xinlei He <i>Ph.D. Student</i> <i>now full professor at Wuhan University</i> (Norton Labs Graduate Fellowship 2022)	2/2020 - 9/2023
Zhengyu Zhao <i>postdoc</i> <i>now full professor at Xi'an Jiaotong University</i>	1/2022 - 8/2023
Tianshuo Cong <i>visiting Ph.D. student from Tsinghua University</i> <i>now research-track professor at Shandong University</i>	8/2021 - 12/2022
Ahmed Salem <i>Ph.D. Student</i> <i>now senior researcher at Microsoft Security Response Center</i>	2/2017 - 1/2022

Service

- PC Member
 - 2026: ICML (Area Chair), ICLR (Area Chair), ACL ARR (Area Chair), KDD (Area Chair), CVPR, AAAI (Senior PC), SaTML
 - 2025: USENIX Security, NDSS, ICML (Area Chair), NeurIPS (Area Chair), ICLR (Area Chair), ACL ARR (Area Chair), ICCV, WWW, KDD (Area Chair), SaTML
 - 2024: IEEE S&P, CCS, ICML, NeurIPS, ICLR, ACL ARR (Area Chair), CVPR, ECCV, WWW, KDD, ACSAC, SaTML
 - 2023: IEEE S&P, CCS, NDSS, ICML, NeurIPS, ICLR, WWW, KDD, SaTML
 - 2022: CCS, USENIX Security, NeurIPS, ICLR, WWW, KDD, AAAI, PETS, ASIACCS
 - 2021: CCS, USENIX Security, WWW, AAAI, Euro S&P, PETS, ASIACCS
 - 2020: CCS, WWW, ICWSM, RAID, PETS
 - 2019: CCS, ISMB/ECCB
- Editorial Board
 - IEEE Transactions on Dependable and Secure Computing (TDSC)
 - IEEE Transactions on Information Forensics and Security (TIFS)
 - ACM Transactions on Privacy and Security (TOPS)
- Organizer
 - Privacy and Security in ML Seminars
- Ph.D. Thesis Committee
 - Quentin Le Roux, University of Rennes, 2025
 - Salijona Dyrnishi, University of Luxembourg, 2024
 - Hailong Hu, University of Luxembourg, 2024
 - Bang Wu, Monash University, 2024
 - Sinem Sav, EPFL, 2023
 - Inken Hagestedt, Saarland University, 2021
 - Benjamin Zhao, University of New South Wales, 2021

Talks

Keynote

- 2025, International Conference on Knowledge Science, Engineering and Management (KSEM)
- 2025, Large Model Safety Workshop
- 2024, International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP)
- 2024, Australasian Conference on Information Security and Privacy (ACISP)
- 2024, ACNS Workshop on Security in Machine Learning and its Applications (SiMLA)
- 2023, Information Security Conference (ISC)
- 2023, The AsiaCCS Workshop on Secure and Trustworthy Deep Learning Systems
- 2023, Backdoor Attacks and Defenses in Machine Learning (BANDS)
- 2022, PAIR2Struct: Privacy, Accountability, Interpretability, Robustness, Reasoning on Structured Data

Seminar and School.....

- 2025, Lecturer at Graz Security Week
- 2024, Talk at Nanyang Technological University
- 2023, Lecturer at Summer School on Privacy-Preserving Machine Learning
- 2023, Talk at EPFL
- 2022, Lecturer at Summer School on Privacy-Preserving Machine Learning
- 2022, Distinguished Lecture in ViSP (Vienna Cybersecurity and Privacy Research Center) Distinguished Lecture Series
- 2021, Vector Visitor Talk at Vector Institute
- 2021, Talk at Privacy and Security in ML Seminars
- 2021, Talk at Inria
- 2020, Talk at University College London

In the Press

- 8/2023, Tricks for making AI chatbots break rules are freely available online, *New Scientist*
- 8/2023, Wie Chatbots die eigenen Regeln vergessen, *Deutschlandfunk Nova*
- 12/2022, The internet loves ChatGPT, but there's a dark side to the tech, *Fast Company*
- 4/2020, As the coronavirus spreads, so does online racism targeting Asians, new research shows, *The Washington Post*