

PUBLICATION RECORD

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Refereed Conference Papers

1. Yiting Qu, Xinyue Shen, Xinlei He, Michael Backes, Savvas Zannettou, Yang Zhang. *Unsafe Diffusion: On the Generation of Unsafe Images and Hateful Memes From Text-To-Image Models*. In Proceedings of ACM CCS, 2023
2. Zeyang Sha, Xinlei He, Ning Yu, Michael Backes, Yang Zhang. *Can't Steal? Cont-Steal! Contrastive Stealing Attacks Against Image Encoders*. In Proceedings of CVPR, 2023.
3. Rui Wen, Zhengyu Zhao, Zhuoran Liu, Michael Backes, Tianhao Wang, Yang Zhang. *Is Adversarial Training Really a Silver Bullet for Mitigating Data Poisoning?* In Proceedings of ICLR, 2023.
4. Yihan Ma, Zhikun Zhang, Ning Yu, Xinlei He, Michael Backes, Yun Shen, Yang Zhang. *Generated Graph Detection*. In Proceedings of ICML, 2023.
5. Ziqing Yang, Xinlei He, Zheng Li, Michael Backes, Mathias Humbert, Pascal Berrang, Yang Zhang. *Data Poisoning Attacks Against Multimodal Encoders*. In Proceedings of ICML, 2023.
6. Yugeng Liu, Zheng Li, Michael Backes, Yun Shen, Yang Zhang. *Backdoor Attacks Against Dataset Distillation*. In Proceedings of NDSS, 2023
7. Sanam Ghorbani Lyastani, Michael Backes, Sven Bugiel. *A Systematic Study of the Consistency of Two-Factor Authentication User Journeys on Top-Ranked Websites*. In Proceedings of NDSS, 2023
8. Hamed Rasifard, Rahul Gopinath, Michael Backes, Hamed Nemati. *SEAL: Capability-Based Access Control for Data-Analytic Scenarios*. In Proceedings of SACMAT, 2023.
9. Yiting Qu, Xinlei He, Shannon Pierson, Michael Backes, Yang Zhang, Savvas Zannettou. *On the Evolution of (Hateful) Memes by Means of Multimodal Contrastive Learning*. In Proceedings of IEEE S&P, 2023.
10. Haiming Wang, Zhikun Zhang, Tianhao Wang, Shibo He, Michael Backes, Jiming Chen, Yang Zhang. *PrivTrace: Differentially Private Trajectory Synthesis by Adaptive Markov Models*. In Proceedings of USENIX Security, 2023.
11. Wai Man Si, Michael Backes, Yang Zhang, Ahmed Salem. *Two-in-One: A Model Hijacking Attack Against Text Generation Models*. In Proceedings of USENIX Security, 2023.
12. Cristian-Alexandru Staicu, Sazzadur Rahaman, Ágnes Kiss, Michael Backes. *Bilingual Problems: Studying the Security Risks Incurred by Native Extensions in Scripting Languages*. In Proceedings of USENIX Security, 2023.
13. Min Chen, Zhikun Zhang, Tianhao Wang, Michael Backes, Yang Zhang. *FACE-AUDITOR: Data Auditing in Facial Recognition Systems*. In Proceedings of USENIX Security, 2023.
14. Zheng Li, Ning Yu, Ahmed Salem, Michael Backes, Mario Fritz, Yang Zhang. *UnGANable: Defending Against GAN-based Face Manipulation*. USENIX Security Symposium 2023: 7213-7230
15. Min Chen, Zhikun Zhang, Tianhao Wang, Michael Backes, Mathias Humbert, Yang Zhang. *Graph Unlearning*. In Proceedings of ACM CCS, 2022.
16. Hai Huang, Zhikun Zhang, Yun Shen, Michael Backes, Qi Li, Yang Zhang. *On the Privacy Risks of Cell-Based NAS Architectures*. In Proceedings of ACM CCS, 2022.

17. Zheng Li, Yiyong Liu, Xinlei He, Ning Yu, Michael Backes, Yang Zhang. *Auditing Membership Leakages of Multi-Exit Networks*. In Proceedings of ACM CCS, 2022.
18. Yiyong Liu, Zhengyu Zhao, Michael Backes, Yang Zhang. *Membership Inference Attacks by Exploiting Loss Trajectory*. In Proceedings of ACM CCS, 2022.
19. Trung Tin Nguyen, Michael Backes, Ben Stock. *Freely Given Consent?: Studying Consent Notice of Third-Party Tracking and Its Violations of GDPR in Android Apps*. In Proceedings of ACM CCS, 2022.
20. Yun Shen, Yufei Han, Zhikun Zhang, Min Chen, Ting Yu, Michael Backes, Yang Zhang, Gianluca Stringhini. *Finding MNEMON: Reviving Memories of Node Embeddings*. In Proceedings of ACM CCS, 2022.
21. Wai Man Si, Michael Backes, Jeremy Blackburn, Emiliano De Cristofaro, Gianluca Stringhini, Savvas Zannettou, Yang Zhang. *Why So Toxic?: Measuring and Triggering Toxic Behavior in Open-Domain Chatbots*. In Proceedings of ACM CCS, 2022.
22. Michael Backes, Pascal Berrang, Lucjan Hanzlik, Ivan Pryvalov. *A Framework for Constructing Single Secret Leader Election from MPC*. In Proceedings of ESORICS, 2022.
23. Ahmed Salem, Rui Wen, Michael Backes, Shiqing Ma, Yang Zhang. *Dynamic Backdoor Attacks Against Machine Learning Models*. In Proceedings of IEEE EuroS&P, 2022.
24. Xinyue Shen, Xinlei He, Michael Backes, Jeremy Blackburn, Savvas Zannettou, Yang Zhang. *On Xing Tian and the Perseverance of Anti-China Sentiment Online*. In Proceedings of ICWSM, 2022.
25. Ahmed Salem, Michael Backes, Yang Zhang. *Get a Model! Model Hijacking Attack Against Machine Learning Models*. In Proceedings of NDSS, 2022.
26. Lukas Bieringer, Kathrin Grosse, Michael Backes, Battista Biggio, Katharina Krombholz. *Industrial practitioners' mental models of adversarial machine learning*. In Proceedings of SOUPS @ USENIX Security Symposium, 2022.
27. Yugeng Liu, Rui Wen, Xinlei He, Ahmed Salem, Zhikun Zhang, Michael Backes, Emiliano De Cristofaro, Mario Fritz, Yang Zhang. *ML-Doctor: Holistic Risk Assessment of Inference Attacks Against Machine Learning Models*. In Proceedings of USENIX Security Symposium, 2022.
28. Zhikun Zhang, Min Chen, Michael Backes, Yun Shen, Yang Zhan. *Inference Attacks Against Graph Neural Networks*. In Proceedings of USENIX Security Symposium, 2022.
29. Xiaoyi Chen, Ahmed Salem, Dingfan Chen, Michael Backes, Shiqing Ma, Qingni Shen, Zhonghai Wu, Yang Zhang. *BadNL: Backdoor Attacks against NLP Models with Semantic-preserving Improvements*. In Proceedings of ACSAC, 2021.
30. Min Chen, Zhikun Zhang, Tianhao Wang, Michael Backes, Mathias Humbert, Yang Zhang. *When Machine Unlearning Jeopardizes Privacy*. In Proceedings of ACM CCS, 2021.
31. Aurore Fass, Dolière Francis Somé, Michael Backes, Ben Stock. *DoubleX: Statically Detecting Vulnerable Data Flows in Browser Extensions at Scale*. In Proceedings of ACM CCS, 2021.
32. Sebastian Roth, Lea Gröber, Michael Backes, Katharina Krombholz, Ben Stock. *12 Angry Developers - A Qualitative Study on Developers' Struggles with CSP*. In Proceedings of ACM CCS, 2021.
33. Trung Tin Nguyen, Duc-Cuong Nguyen, Michael Schilling, Gang Wang, Michael Backes. *Measuring User Perception for Detecting Unexpected Access to Sensitive Resource in Mobile Apps*. In Proceedings of ACM AsiaCCS, 2021.
34. Lucjan Hanzlik, Yang Zhang, Kathrin Grosse, Ahmed Salem, Maximilian Augustin, Michael Backes,

- Mario Fritz. *MLCapsule: Guarded Offline Deployment of Machine Learning as a Service*. In Proceedings of CVPR Workshops, 2021.
35. Marvin Moog, Markus Demmel, Michael Backes, Aurore Fass. *Statically Detecting JavaScript Obfuscation and Minification Techniques in the Wild*. In Proceedings of DSN, 2021.
 36. Kathrin Grosse, Michael Backes. *Do winning tickets exist before DNN training?* In Proceedings of SDM, 2021.
 37. Yusra Elbitar, Michael Schilling, Trung Tin Nguyen, Michael Backes, Sven Bugiel. *Explanation Beats Context: The Effect of Timing & Rationales on Users' Runtime Permission Decisions*. In Proceedings of USENIX Security, 2021.
 38. Xinlei He, Jinyuan Jia, Michael Backes, Neil Zhenqiang Gong, Yang Zhang. *Stealing Links from Graph Neural Networks*. In Proceedings of USENIX Security, 2021.
 39. Trung Tin Nguyen, Michael Backes, Ninja Marnau, Ben Stock. *Share First, Ask Later (or Never?) Studying Violations of GDPR's Explicit Consent in Android Apps*. In Proceedings of USENIX Security, 2021.
 40. Zhikun Zhang, Tianhao Wang, Jean Honorio, Ninghui Li, Michael Backes, Shibo He, Jiming Chen, and Yang Zhang. *PrivSyn: Differentially Private Data Synthesis*. In Proceedings of USENIX Security, 2021.
 41. Jie Huang, Michael Backes, and Sven Bugiel. *All you and Privacy don't have to be mutually exclusive: Constraining Accessibility Service Misuse on Android*. In Proceedings of USENIX Security, 2021.
 42. Marten Oltrogge, Nicolas Huaman, Sabrina Amft, Yasemin Acar, Michael Backes, and Sascha Fahl. *Why Eve and Mallory Still Love Android: Revisiting TLS (In)Security in Android Applications*. In Proceedings of USENIX Security, 2021.
 43. Robert Künnemann, Deepak Garg, Michael Backes. *Accountability in the Decentralised-Adversary Setting*. In Proceedings of IEEE CSF, 2021.
 44. Sanam Ghorbani Lyastani, Michael Schilling, Michaela Neumayr, Michael Backes, and Sven Bugiel. *Is FIDO2 the Kingslayer of User Authentication? A Comparative Usability Study of FIDO2 Passwordless Authentication*. In Proceedings of IEEE S&P, 2020.
 45. Yang Zhang, Mathias Humbert, Bartłomiej Surma, Praveen Manoharan, Jilles Vreeken, and Michael Backes. *Towards Plausible Graph Anonymization*. In Proceedings of NDSS, 2020.
 46. Stefano Calzavara, Sebastian Roth, Alvise Rabitti, Michael Backes, and Ben Stock. *A Tale of Two Headers: A Formal Analysis of Inconsistent Click-Jacking Protection on the Web*. In Proceedings of Usenix Security, 2020.
 47. Ahmed Salem, Apratim Bhattacharya, Michael Backes, Mario Fritz, and Yang Zhang. *Updates-Leak: Data Set Inference and Reconstruction Attacks in Online Learning*. In Proceedings of Usenix Security, 2020.
 48. Inken Hagestedt, Mathias Humbert, Pascal Berrang, Irina Lehmann, Roland Eils, Michael Backes, and Yang Zhang. *Membership Inference Against DNA Methylation Databases*. In Proceedings of EuroS&P, 2020.
 49. Ilkan Esiyok, Lucjan Hanzlik, Robert Künnemann, Lena Marie Budde, and Michael Backes. *TrollThrottle - Raising the Cost of Astroturfing*. In Proceedings of ACNS, 2020.
 50. Sebastian Roth, Michael Backes, and Ben Stock. *Assessing the Impact of Script Gadgets on CSP at Scale*. In Proceedings of AsiaCCS, 2020.

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54. Tahleen Rahman, Bartłomiej Surma, Michael Backes, and Yang Zhang. *Fairwalk: Towards Fair Graph Embedding*. In Proceedings of IJCAI, 2019.
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57. Saba Eskandarian, Jonathan Cogan, Sawyer Birnbaum, Peh Chang Wei Brandon, Dillon Franke, Forest Fraser, Gaspar Garcia, Eric Gong, Hung T. Nguyen, Taresh K. Sethi, Vishal Subbiah, Michael Backes, Giancarlo Pellegrino, Dan Boneh. *Fidelius: Protecting User Secrets from Compromised Browsers*. In Proceedings of IEEE Symposium on Security and Privacy, 2019.
58. Duc Cuong Nguyen, Erik Derr, Michael Backes, Sven Bugiel. *Short Text, Large Effect: Measuring the Impact of User Reviews on Android App Security & Privacy*. In Proceedings of IEEE Symposium on Security and Privacy, 2019.
59. Alexander Dax, Sven Tangermann, Robert Künnemann, Michael Backes. *How to wrap it up - A formally verified proposal for the use of authenticated wrapping in PKCS#11*. In Proceedings of IEEE Computer Security Foundations Symposium, 2019.
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64. Marten Oltrogge, Erik Derr, Christian Stransky, Yasemin Acar, Sascha Fahl, Christian Rossow, Giancarlo Pellegrino, Sven Bugiel, Michael Backes. *The Rise of the Citizen Developer: Assessing the Security Impact of Online App Generators*. In Proceedings of IEEE Symposium on Security and Privacy, 2018.
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