

MINGXUAN YAO

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RESEARCH INTERESTS	Cyber forensics and systems security with a focus on web application security, large-scale security measurement, malware analysis, and binary program instrumentation.	
EDUCATION	Ph.D. in Electrical and Computer Engineering Georgia Institute of Technology Cyber Forensics Innovation Laboratory Advisor: Dr. Brendan Saltaformaggio	Spring 2019 - Present Atlanta,GA
	Master of Science in Cybersecurity Georgia Institute of Technology	Fall 2017 - Fall 2018 Atlanta,GA
	B. E. in Information Security University of Electronic Science and Technology of China	Fall 2013 - Fall 2017 Chengdu, China
HONORS & AWARDS	Scholarship (ISC) ² Graduate Cybersecurity Scholarship	2020
	Travel Grants NDSS Symposium	2020
	IEEE Symposium on Security and Privacy	2024
PUBLICATIONS	Mulugeta, D., Fróes, L., Yao, M. , Saltaformaggio, B., “In the Clouds: Detecting and Defending Against Cloud-based Command and Control,” In Submission To <i>Blackhat USA</i> , Las Vegas, NV, Aug. 2024.	
	Yao, M. , Zhang, R., Xu, H., Chou, R., Paturi, V., Sikder, A., Saltaformaggio, B., “Pulling Off The Mask: Forensic Analysis of the Deceptive Creator Wallets Behind Smart Contract Fraud,” To Appear In <i>45th IEEE Symposium on Security and Privacy (S&P '24)</i> , San Francisco, CA, May. 2024. Acceptance Rate: 17.8%	
	Xu, H., Yao, M. , Zhang, R., Moustafa, M., Park, J., Saltaformaggio, B., “DVa: Extracting Victims and Abuse Vectors from Android Accessibility Malware,” To Appear In <i>33rd USENIX Security Symposium (Security '24)</i> , Philadelphia, PA, Aug. 2024.	
	Yao, M. , Fuller, J., Pai Kasturi, R., Agarwal S., Sikder A., and Saltaformaggio, B., “Hiding in Plain Sight: An Empirical Study of Web Application Abuse in Malware,” in <i>Proceedings of the 32nd USENIX Security Symposium (Security '23)</i> , Anaheim, CA, Aug. 2023. Acceptance Rate: 28%. 🌟 Available, Functional. Video Link	
	Yang, H., Yao, M. , Xu, Z. and Liu, B., 2017, December. LHCSAS: A lightweight and highly-compatible solution for ADS-B security. In <i>GLOBECOM 2017-2017 IEEE Global Communications Conference (pp. 1-7)</i> . IEEE.	
	Yang, H., Zhou, Q., Yao, M. , Lu, R., Li, H. and Zhang, X., 2018. A practical and compatible cryptographic solution to ADS-B security. <i>IEEE Internet of Things Journal</i> , 6(2), pp.3322-3334.	
	Yang, H., Huang, Y., Yu, Y., Yao, M. and Zhang, X., 2017, December. Privacy-preserving extraction of hog features based on integer vector homomorphic encryption. In <i>International Conference on Information Security Practice and Experience (pp. 102-117)</i> . Springer, Cham.	

RELEVANT COURSEWORK	Advanced Malware Analysis, Information Processing Models of Neural Systems, Advanced Computer Architecture, Applied Cryptography, Secure Computer System, CTF Lab, Computer Virus and Protection	
RESEARCH EXPERIENCE	Graduate Research Assistant Georgia Institute of Technology Under the guidance of Dr. Brendan Saltaformaggio, my research currently focuses on cyber forensics by using state-of-the-art techniques.	Spring 2019 - Present Atlanta,GA
INVITED TALKS	NSA CAE-R Research Symposium Poster Presenter	Sep 2023
	IEEE SecDev SecDev Tutorial Presenter	Oct 2023
	Georgia Institute of Technology Georgia Congressional Staffers' Visit School of Cybersecurity and Privacy Security Seminar	Aug 2023 Oct 2022
TEACHING	Guest Instructor, Georgia Institute of Technology ECE 4894 A: Introduction to Malware Reverse Engineering ECE 6747: Advanced Topics in Malware Analysis Teaching Assistant, Georgia Institute of Technology CS 6262: Network Security	Spring 2020 Fall 2022, 2023 Spring 2018
SELECT MEDIA COVERAGE	Playing Hide and Seek with Malware. ACM Tech News . Playing Hide and Seek with a New Breed of Malware Threatening Millions of Users. Georgia Institute of Technology Science of Security Virtual Organization Researchers Find a New Breed of Malware Hiding in Dropbox, Discord. Tech Times A New Breed of Malware Hides in Plain Sight. Israel Homeland Security Playing Hide and Seek with a New Breed of Malware Threatening Millions of Users. Tech Xplore	
SERVICE	Professional Contributions <i>Artifact Evaluation Committee Member</i> Network and Distributed System Security Symposium (NDSS) <i>Publicity Co-Chair</i> Network and Distributed System Security Symposium (NDSS)	2024 2023
	Volunteer IEEE Secure Development Conference	2022
	Open Source Contributor S2E	
	External Reviewer Research in Attacks, Intrusions, and Defenses (RAID) IEEE Symposium on Security and Privacy (S&P) The Advanced Computing Systems Association (USENIX)	2021 2021-2022 2021-2022

Network and Distributed System Security Symposium (NDSS)	2020-2022
ACM Computer and Communications Security (CCS)	2020
Annual Computer Security Applications Conference (ACSAC)	2020-2022
Computers & Security Journal (COSE)	2019 - 2020
IEEE European Symposium on Security and Privacy (Euro S&P)	2020
The Web Conference (formerly WWW)	2019 - 2020
Research in Attacks, Intrusions, and Defenses (RAID)	2019-2021
Information Security Conference (ISC)	2019 - 2020
ACM Transactions on Privacy and Security (TOPS)	2019-2020
European Symposium on Research in Computer Security (ESORICS)	2020