

RANJITA PAI KASTURI

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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 Spring 2018 - Present Georgia Institute of Technology Atlanta, GA Cyber Forensics Innovation Laboratory Advisor: Dr. Brendan Saltaformaggio
	Master of Science in Electrical and Computer Engineering May 2019 Georgia Institute of Technology Atlanta, GA
	B. E. Hons. in Electrical & Electronics Engineering July 2014 M.Sc Hons. in Physics July 2014 Birla Institute of Technology & Science, Pilani Goa, India
HONORS & AWARDS	2021 Microsoft PhD Fellowship Finalist December 2021 One of the top 20 finalists from over 600 applicants.
	2020 ISC² Graduate Scholarship Award: \$1,000 July 2020 One of the 20 recipients in a pool of 222 applicants internationally.
	2020 Facebook Fellowship Finalist [media] January 2020 Top 4% of the 1800+ applicants.
	CREATE-X Golden Ticket Award: \$4,000 September 2019 First place in Institute for Information Security & Privacy (IISP, Georgia Tech) Cybersecurity Summit for high impact research with commercialization potential.
	Best Poster Runner-up Award: \$500 September 2019 Second place in IISP Cybersecurity Summit, Georgia Tech for research posters.
	IISP Cybersecurity Fellowship Award: \$12,500 Fall 2018, Spring 2019, Spring 2021 IISP fellowship to support emerging cybersecurity research to take exceptional ideas from concept to proof.
	Dragos Training Fellowship Award: \$4,500 May 2019 Fully sponsored Dragos on-site training at Hanover, MD for assessing, hunting and monitoring cyber threats in industrial control system networks.
	Travel Grants
	NDSS Symposium 2020
	NSF I-CORPS Sites [interview] 2019
	USENIX Security Symposium (USENIX Security) 2019
	Women in Cyber Security (WiCyS) 2019 Conference 2019
PUBLICATIONS	Peer-Reviewed Articles
	1. Alrawi, O., Ike, M., Pruett, M., Pai Kasturi, R. , Barua, S. Hirani, T., Hill, B. Saltaformaggio, B., “Forecasting Malware Capabilities From Cyber Attack Memory Images,” in <i>Proceedings of the 30th USENIX Security Symposium (Security)</i> , Vancouver, Canada, Aug. 2021. Acceptance Rate: TBD
	2. Duan, R., Alrawi, O., Pai Kasturi, R. , Elder, R., Saltaformaggio, B., Lee, W., “Towards Measuring Supply Chain Attacks on Package Managers,” in

Proceedings of the 2021 Annual Network and Distributed System Security Symposium (NDSS), San Diego, CA, Feb. 2021. Acceptance Rate: TBD

3. **Pai Kasturi, R.**, Sun, Y., Duan, R., Alrawi, O., Asdar, E., Zhu, V., Kwon, Y., Saltaformaggio, B., "TARDIS: Rolling Back The Clock On CMS-Targeting Cyber Attacks," in *Proceedings of the 41st IEEE Symposium on Security and Privacy (S&P)*, San Francisco, CA, May 2020. Acceptance rate: 12.3%. **CREATE-X Golden Ticket Award (\$4,000), NSF I-CORPS Sites (\$3,000)**
4. Alrawi, O., Zuo, C., Duan, R., **Pai Kasturi, R.**, Lin, Z., Saltaformaggio, B., "The Betrayal At Cloud City: An Empirical Analysis Of Cloud-Based Mobile Backends," in *Proceedings of the 28th USENIX Security Symposium (Security)*, Santa Clara, CA, Aug. 2019. Acceptance rate: 15.7%. **CSAW Applied Research Competition Award Finalist**

RELEVANT COURSEWORK Advanced Malware Analysis, Information Processing Models of Neural Systems, Advanced Computer Architecture, Machine Learning for Trading, Advanced Programming Techniques, Linear Systems and Controls.

RESEARCH EXPERIENCE **Graduate Research Assistant** Spring 2018 - Present
Georgia Institute of Technology Atlanta,GA

TEACHING **Guest Instructor, Georgia Institute of Technology**
ECE 4894 A: Introduction to Malware Reverse Engineering Spring 2020
ECE 8803-A/4833-A: Advanced Topics in Malware Analysis Fall 2019

INVITED TALKS **Research For The Soul - My Life, A 30 Minute Tale.** Oct 2018
Georgia State University, Atlanta, GA [[link](#)]

PROFESSIONAL EXPERIENCE **ASIC Engineer** February 2016 - June 2017
NVIDIA Bangalore, India
As a verification engineer for GPU and SoC projects, I developed a reusable design agnostic UVM test environment for functional verification of PCIe controllers.

ASIC Engineer July 2014 - January 2016
Infirera Bangalore, India
I led a team of 2 interns to design and implement Reusable Test Environment for General Communications Channel IP and for optical networking interface processors.

SERVICE **External Reviewer** (Total = 17)
IEEE Symposium on Security and Privacy (S&P) 2021
USENIX Security Symposium (USENIX) 2021
ACM Computer and Communications Security (CCS) 2020
Network and Distributed System Security Symposium (NDSS) 2018 - 2021
IEEE European Symposium on Security and Privacy (Euro S&P) 2020 - 2021
Research in Attacks, Intrusions, and Defenses (RAID) 2018 - 2020
The Web Conference (formerly WWW) 2019 - 2020
Workshop on Binary Analysis Research (BAR) co-located with NDSS 2019
Computers & Security Journal (COSE) 2019
Information Security Conference (ISC) 2019

EXTRA-CURRICULAR ACTIVITIES **Yoga Volunteer** May 2018 - Dec 2019
Evolution Yoga Studio Atlanta, Georgia

Theater Actor August 2014 - June 2015
Barking Dog Productions Bengaluru, India
Cast of the popular play - The Vagina Monologues [[link](#)]