

ASHISH HOODA

PERSONAL INFORMATION	e-mail: ahooda@wisc.edu Phone: +1 (616) 4698416 https://pages.cs.wisc.edu/~hooda/	
EDUCATION	University of Wisconsin-Madison , Madison, WI Doctoral Student, Computer Science	Aug 2019 - Present
	Indian Institute of Technology, Delhi , India B.E. in Electrical Engineering (<i>Minor in Computer Science</i>)	July 2014 - May 2018
INTERESTS	Security & Privacy, Computer Vision, Transformers, Foundational Models, Graph Learning	
PUBLICATIONS	Investigating Stateful Defenses Against Black-Box Adversarial Examples Ashish Hooda*, Neal Mangaokar*, Ryan Feng*, Kassem Fawaz, Somesh Jha, Atul Prakash * : CO FIRST AUTHORS Preprint (https://pages.cs.wisc.edu/~hooda/stateful-blackbox.pdf)	
	Towards Adversarially Robust Deepfake Detection: An Ensemble Approach Ashish Hooda*, Neal Mangaokar*, Ryan Feng, Kassem Fawaz, Somesh Jha, Atul Prakash Under Review at ICML, 2023 (https://arxiv.org/abs/2202.05687)	
	Re-purposing Perceptual Hashing based Client Side Scanning for Physical Surveillance Ashish Hooda, Andrey Labunets, Tadayoshi Kohno, Earlene Fernandes Preprint (https://arxiv.org/abs/2212.04107)	
	SkillFence: A Systems Approach to Mitigating Voice-Based Confusion Attacks Ashish Hooda, Matthew Wallace, Kushal Jhunjhunwalla, Earlene Fernandes, Kassem Fawaz <i>Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)</i> , 2022 [Paper]	
	Invisible Perturbations: Physical Adv Examples Exploiting the Rolling Shutter Effect Ashish Hooda*, Athena Sayles*, , Mohit Gupta, Rahul Chatterjee, Earlene Fernandes <i>Conference on Computer Vision and Pattern Recognition (CVPR)</i> , 2021 [Paper]	
WORK EXPERIENCE	Applied Scientist Intern , Amazon AWS Research <i>Supervisor: Ali Torkamani</i>	June 2022 - September 2022
	Developed an efficient Graph Neural Network training framework that scales to billion node scale graphs. Utilized residual quantization to reduce codebook size without sacrificing precision. Demonstrated memory and compute efficiency on the largest Open Graph Benchmark dataset - ogbn-papers100M.	
	Software Engineer , Microsoft India R&D	June 2018 - July 2019
	Worked on Omnichannel Engagement Hub in the Dynamics CRM team; Created a Microsoft Azure Service-Fabric based service for configuring presence of a user. Developed a End to End testing framework called Scalpel for the Omnichannel Environment. Proposed and Implemented a probabilistic distribution model for agent assignment with real-time feedback.	
	Software Summer Intern , Microsoft India R&D	May 2017 - August 2017
	Research Intern , IMT Atlantique	September 2016 - December 2016
	Hardware Summer Intern , NVIDIA Graphics R&D	May 2016 - August 2016
TECHNICAL	Languages: Python, Java, C++, C, MATLAB Frameworks/Libraries: PyTorch, Tensorflow, Apache Spark, Deep Graph Library	

SERVICE

- Reviewer: Workshop on Understanding of Foundation Models (ME-FoMo), ICLR 2023
- Artifact Evaluation Committee Member: USENIX Security Symposium '22
- External Reviewer: USENIX Security Symposium
- External Reviewer: IEEE Symposium on Security and Privacy (IEEE S&P)

AWARDS & ACHIEVEMENTS

- Runner up in CS Research Symposium, 2022 (UW Madison).
- Qualified for regionals at ACM International Collegiate Programming Contest (ICPC), 2017.
- Runner-up at Microsoft CODE-FUN-DO Hackathon, 2015.
- Secured **All India Rank 4** in Central Board of Secondary Education (CBSE) Board Examination given by over 2 million students.
- Secured **All India Rank 17** in Joint Entrance Exam (JEE) given by over 1 million students.
- Selected for Special Class Railway Apprentice (SCRA) (Top 100 out of over 0.1 million applicants).
- Awarded the Junior Science Talent Search Examination (JSTSE) Scholarship.