# Naman Gupta

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Interests: I examine digital safety through interdisciplinary and decolonial lenses, focusing on technology-facilitated gender-based violence. My work identifies barriers faced by marginalized communities in seeking support, healing, and resilience. Additionally, I lead outreach efforts at the Madison Tech Clinic (MTC).

#### **EDUCATION**

#### University of Wisconsin-Madison, USA

Aug, 2021 - Present

PhD in Computer Sciences

Minor in Psychology, Gender & Women Studies, Law, and Education Policy

Advisor: Rahul Chatterjee | Expected Graduation Date: Dec'2026

Primary work with MadS&P | Affiliated with Preventing Interpersonal Violence and Overcoming Trauma (PIVOT) and Sexual Violence Research Initiative (SVRI)

# Indraprastha Institute of Information Technology, Delhi, India

Aug'2013 - Apr'2017

Bachelor of Technology in Computer Science & Engineering

#### Publications

- 1. Sophie Stephenson, **Naman Gupta**, Akhil Polamarasetty, Kyle Huang, David Youssef, Kayleigh Cowan, and Rahul Chatterjee, "A Case Study on Legal Evidence of Technology-Facilitated Abuse in Wisconsin, USA" **Conditionally accepted to CSCW 2025**.
- Naman Gupta, Kate Walsh, Sanchari Das, and Rahul Chatterjee, "Barriers and Challenges Faced by Survivors of Technology-Facilitated Abuse in Seeking Social Support". USENIX Security 2024.
- Naman Gupta, Sanchari Das, Kate Walsh, and Rahul Chatterjee, "A Critical Analysis of the Prevalence of Technology-facilitated Abuse in US College Students". Late Breaking Work at CHI 2024.
- Rose Ceccio\*, Naman Gupta\*, Majed Almansoori\*, and Rahul Chatterjee, "Analyzing Patterns and Behavior
  of Users When Detecting and Preventing Tech-enabled Stalking". Workshop on Usable Security and Privacy
  (USEC) NDSS 2023.
- 5. Mohannad Alhanahnah, Philipp Schubert, **Naman Gupta**, Thomas Reps, Somesh Jha, and Eric Bodden, "slash: A Technique for Static Configuration-Logic Identification". **arXiv, 2022**.
- 6. Zhe Tao, Aseem Rastogi, **Naman Gupta**, Kapil Vaswani, and Aditya V. Thakur, "DICE\*: A Formally Verified Implementation of DICE Measured Boot". **USENIX Security 2021**.
- Naman Gupta\*, Srishti Sengupta\* and Vinayak Naik. "A firewall for internet of things.". COMSNETS, 2017. Undergraduate Thesis.
- 8. Naman Gupta\*, Anmol Singh\*, and Sachit Butail. "The effect of instructional priming on postural responses to virtual crowds.". Workshop on Virtual Humans and Crowds in Immersive Environments (VHCIE) IEEEVR, 2017.

\*Equal contribution.

### FELLOWSHIPS AND GRANTS

• Pre-doctoral Fellowship: Microsoft Research	2020-21
• Research Grant: Office of Victim and Crime (OVC), Department of Justice	2022
• Travel Grant: Network and Distributed System Security (NDSS) Symposium	2023
• Travel Grant: USENIX Security	2024
• Travel Grant: EuroS&P (Virtual)	2021
• Best runners-up talk at CS Research Symposium, UW-Madison	2023

## Professional Experience

- Developed a toolchain to evaluate the first-ever formally verified secure boot firmware on commodity hardware.
- Conducted security evaluations on Trusted Execution Environments (TEE) for GPUs, uncovering concurrency bugs.
- Designed a COVID-19 health certificate issuance system using Microsoft CCF.
- Improved Blendnet, an offline hyper-local video streaming solution for financial inclusion, optimizing WiFi throughput and latency.

# DevSecOps Engineer at Grab, India | Singapore

Aug'2018 - Dec'2019

- Led defensive security initiatives, enforcing hardening policies on payment infrastructure.
- Implemented application security policies on all company-wide Kubernetes clusters.
- Designed a secret-sharing policy for third-party vendor exchanges and vulnerability patching workflows.
- Organized Grab's Security Awareness CTF, developing cryptography challenges.

# Site Reliability Engineer at Media.net, India

Jun'2017 - Aug'2018

- Migrated a latency-sensitive Java application to a stateless microservice architecture, improving scalability and reducing costs by 80%.
- Designed a blue-green auto-scaling pipeline for a real-time ad-serving platform, increasing performance by 35% with 50% weekly traffic growth.
- · Created an automated ticketing system to track infrastructure vulnerabilities and accountability.
- Conducted security training for 30+ new hires on Git, virtualization, Python, and systems security.

#### SERVICE

• Associate Chair (Program	Committee)	CSCW'25
• External Reviewer	EuroUSEC'24, CHI LBW'24, CSC	W'24 🏅 , Violence Against Women (VAW)
• Poster Committee	\$	SOUPS'24 🏅 & IEEE S&P'24 (Oakland) 🏅
<ul> <li>Artifact Evaluation</li> </ul>		NDSS'25 🏅
• Organizer for Queer in Secu	rity & Privacy	NDSS 2023
Organizer HCI Reading Gro	up at UW-Madison	2024-2025
Organizer Decolonial Collection	tive at UW-Madison	2025
Special recognition for an	outstanding review.	

### TALKS AND PANELS

Mar, 2025
Feb, 2025
Dec, 2024
Aug, 2024
Apr, 2024
Nov, 2024

# TEACHING AND ADVISING

• Teaching Assistant (UW-Madison)	Capstone Projects (150+) x2, AI (150+) & Programming-III (800+)	
<ul><li>Mentor (UW-Madison)</li></ul>	Mentoring 5 incoming CS International Graduate Students	
• Teaching Assistant (IIIT-Delhi & N	PTEL) Mobile Computing (200+)	
• Student-Instructor	DSA and System Programming for incoming master's students (50+)	
• Lead, Mentor Program	Paired 200 freshmen with senior students for independent projects	
• Administrator	Software Development Club (conducted several hackathons)	
• Talks (sophomore level, 200+)	Virtualization, Security, Git, node.js, MVC frameworks	
• Mentor	Rails Girls Summer of Code	
<ul> <li>Organising Team</li> </ul>	1st Blockchain Summit in India	
• Judge	Google's Code to Learn Contest 2016	