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, Data, and Information Science
Minor in Psychology, Gender & Women Studies, Law, and Education Policy
Advisor: Rahul Chatterjee | Expected Graduation Date: Dec 2026
Director of Community Outreach and Training at Madison Tech Clinic
Primary work with MadS&P | Affiliated with Preventing Interpersonal Violence and Overcoming Trauma (PIVOT), Native American Women Thriving through Innovative Violence Prevention and Empowerment (NATIVE), 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. Julia Nonnenkamp, **Naman Gupta**, Abhimanyu Gupta, and Rahul Chatterjee, "[redacted]" **In-submission at CCS 2025**.

2. 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" **Accepted to CSCW 2025**.

3. **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**.

4. **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**.

5. 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**.

6. Mohannad Alhanahnah, Philipp Schubert, **Naman Gupta**, Thomas Reps, Somesh Jha, and Eric Bodden, "slash: A Technique for Static Configuration-Logic Identification". **arXiv, 2022**.

7. Zhe Tao, Aseem Rastogi, **Naman Gupta**, Kapil Vaswani, and Aditya V. Thakur, "DICE*: A Formally Verified Implementation of DICE Measured Boot". **USENIX Security 2021**.

8. **Naman Gupta***, Srishti Sengupta* and Vinayak Naik. "A firewall for internet of things.". **COMSNETS, 2017**. *Undergraduate Thesis.*

9. **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

- **Morgridge Fellow** for Community-Engaged Scholarship (CES)   2025
- **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

Pre-doctoral Research Fellow at Microsoft Research (MSR), India | UK   Jan'2020 - Jul'2021
Confidential Computing Group and Technology for Emerging Markets Group

- 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, CSCW'24 🏅, Violence Against Women (VAW)
- **Poster Committee**   SOUPS'24 🏅 & IEEE S&P'24 (Oakland) 🏅
- Artifact Evaluation   NDSS'25 🏅
- **Organizer** for Queer in Security & Privacy   NDSS 2023
- **Organizer** HCI Reading Group at UW-Madison   2024-2025
- **Organizer** Decolonial Collective at UW-Madison   2025

   🏅 Special recognition for an outstanding review.

TALKS AND PANELS

- **Panelist**: Reclaim Our Love Conference   Mar, 2025
- **Guest Lecture**: PSYCH311: Sexual Violence   Feb, 2025
- **Invited Talk**: Psychi Honor Society   Dec, 2024
- **Invited Talk**: WI Dept of Justice, MMIW Taskforce   Aug, 2024
- **Invited Poster**: UW-Madison: Research day at the UW State Capitol   Apr, 2024
- **Organizer and Panelist** Navigating PhD coursework and stressors at UW-Madison   Nov, 2024

TEACHING AND ADVISING

- **Teaching Assistant (UW-Madison)**   Capstone Projects (150+) x2, AI (150+) & Programming-III (800+)
- **Mentor (UW-Madison)**   Mentoring 5 incoming CS International Graduate Students
- **Teaching Assistant (IIIT-Delhi & NPTEL)**   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
- **Organising Team** 1st Blockchain Summit in India
- **Judge** Google's Code to Learn Contest 2016