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

Director of Community Outreach and Training at Madison Tech Clinic

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. 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