Lucy Qin

lucy.qin@georgetown.edu
https://lucyq.in

Updated November 2026. Does not include publications or grants under review. Information is available upon request.

Current Position

Postdoctoral Associate — *March 2024–Present*
Georgetown University, Washington, DC
Fritz Postdoctoral Fellow, Initiative on Tech and Society
Massive Data Institute Fellow, McCourt School of Public Policy

Education

Brown University, Providence, RI — *September 2019–May 2025*
Ph.D., Computer Science
NSF Graduate Research Fellow
Meta Research PhD Fellowship Finalist
Thesis: Cryptography in Support of Public Policy Use Cases

Tufts University, Medford, MA — *May 2015*
B.S., Computer Science, Economics

Publications

† Equal contribution
* Authors listed alphabetically, per convention in cryptography

"I Thought You Were The Uncensored Place": Norms, Rules, and Moderation in AI-Generated Sexual Content Communities
Lucy Qin†, Jaron Mink†, Elissa M. Redmiles
AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES), 2026

Examining Risks Through a Characterization of the AI Companion Application Ecosystem: A Stratified Sample from the Apple App Store and Google Play Store
Natalie Grace Brigham, **Lucy Qin**, Tadayoshi Kohno
AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES), 2026

"Unlimited Realm of Exploration and Experimentation": Methods and Motivations of AI-Generated Sexual Content Creators
Jaron Mink†, **Lucy Qin**†, Elissa M. Redmiles
ACM Conference on Fairness, Accountability, and Transparency (FAccT), 2026

Caught in a Mafia Romance: How Users Explore Intimate Narratives with Chatbots
Julia Kieserman, Cat Mai, Sara Lignell, **Lucy Qin**, Athanasios Andreou, Damon McCoy, Rosanna Bellini
ACM Conference on Human Factors in Computing Systems (CHI), 2026

Humanitarian Aid Distribution with Privacy-Preserving Assessment Capabilities
Christian Knabenhans, **Lucy Qin**, Justinas Sukaitis, Vincent Graf Narbel, Carmela Troncoso
Privacy Enhancing Technologies Symposium (PETS), 2026
- Selected for Presentation at *IACR Real World Crypto, 2025*
- Collaboration with the International Committee of the Red Cross

Stop the Nonconsensual Use of Nude Images in Research
Princessa Cintaqia, Arshia Arya, Elissa M. Redmiles, Deepak Kumar, Allison McDonald†, **Lucy Qin**†
Conference on Neural Information Processing Systems (NeurIPS), 2025
- Selected for Panel (Oral) Presentation
- Accepted (Non-Archival) at the *AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES), 2025*

"Did They F*ing Consent to That?": Safer Digital Intimacy via Proactive Protection Against Image-Based Sexual Abuse**
Lucy Qin, Vaughn Hamilton, Sharon Wang, Yigit Aydinalp, Marin Scarlett, Elissa M. Redmiles
USENIX Security Symposium, 2024
- Collaboration with the European Sex Workers' Rights Alliance

Secure Account Recovery for a Privacy-Preserving Web Service
Ryan Little, **Lucy Qin**, Mayank Varia
USENIX Security Symposium, 2024
- Collaboration with Callisto (nonprofit)

You Still See Me: How Data Protection Supports the Architecture of AI Surveillance
Rui-Jie Yew, **Lucy Qin**, Suresh Venkatasubramanian
AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES), 2024
- 🎗 Best Student Paper Runner-Up

Synq: Public Policy Analytics Over Encrypted Data
Zachary Espiritu, Marilyn George, Seny Kamara, **Lucy Qin***
IEEE Symposium on Security and Privacy (S&P), 2024

GOLDBAR: A Framework for Combinatorial Biological Design
Nicholas Roehner, James Roberts, Andrei Lapets, Dany Gould, Vidya Akavoor, **Lucy Qin**, D. Benjamin Gordon, Christopher Voigt, Douglas Densmore
ACS Synthetic Biology, 2024

Attached to "The Algorithm": Making Sense of Algorithmic Precarity on Instagram
Yim Register, **Lucy Qin**, Amanda Baughan, Emma S. Spiro
ACM Conference on Human Factors in Computing Systems (CHI), 2023

A Decentralized and Encrypted National Gun Registry
Seny Kamara, Tarik Moataz, Andrew Park, **Lucy Qin***
IEEE Symposium on Security and Privacy (S&P), 2021
- Collaboration with U.S. Senator Ron Wyden's Office

From Usability to Secure Computing and Back Again
Lucy Qin, Andrei Lapets, Frederick Jansen, Peter Flockhart, Kinan Dak Albab, Ira Globus-Harris, Shannon Roberts, Mayank Varia
USENIX Symposium on Usable Privacy and Security (SOUPS), 2019
- Collaboration with the Boston Women's Workforce Council (City of Boston Mayor's Office) and the Greater Boston Chamber of Commerce

Standardizing Automated DNA Assembly: Best Practices, Metrics, and Protocols Using Robots
David I. Walsh, III, Marilene Pavan, Luis Ortiz, Scott Wick, Johanna Bobrow, Nicholas J. Guido, Sarah Leinicke, Dany Fu, Shreya Pandit, **Lucy Qin**, Peter A. Carr, Douglas Densmore
SLAS Technology: Translating Life Sciences Innovation, SAGE Journals, 2019

Role-Based Ecosystem for the Design, Development, and Deployment of Secure Multi-Party Data Analytics Applications
Andrei Lapets, Kinan Dak Albab, Rawane Issa, **Lucy Qin**, Mayank Varia, Azer Bestavros, Frederick Jansen
IEEE Secure Development Conference (SecDev), 2019

Peer-Reviewed Short Papers & Extended Abstracts

Tutorial: Deploying Secure Multi-Party Computation on the Web Using JIFF
Kinan Dak Albab, Rawane Issa, Andrei Lapets, Peter Flockhart, **Lucy Qin**, Ira Globus-Harris
IEEE Secure Development Conference (SecDev), 2019

Callisto: A Cryptographic Approach to Detecting Serial Perpetrators of Sexual Misconduct
Anjana Rajan, **Lucy Qin**, David W. Archer, Dan Boneh, Tancrède Lepoint, Mayank Varia
ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS), 2018
- 🎗 Best Short Paper (Note) Award
- Collaboration with Callisto (nonprofit)

Accessible Privacy-Preserving Web-Based Data Analysis for Assessing and Addressing Economic Inequalities
Andrei Lapets, Frederick Jansen, Kinan Dak Albab, Rawane Issa, **Lucy Qin**, Mayank Varia, Azer Bestavros
ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS), 2018
- Collaboration with the Boston Women's Workforce Council (City of Boston Mayor's Office)

Technical Reports & Policy Products

Toward Evidence-Based Interventions: Foundation Model Mitigations of AI-Generation of Non-Consensual Intimate Imagery (NCII) and Their Gaps
Hanna Barakat, Jaron Mink, **Lucy Qin***, Elissa M. Redmiles, Kate Ruane, Becca Branum
Center for Democracy & Technology Report, October 2026

Toward Safer Intimate Futures: Recommendations for Tech Platforms to Reduce Image-Based Sexual Abuse
Lucy Qin, Vaughn Hamilton, Yigit Aydinalp, Marin Scarlett, Sharon Wang, Elissa M. Redmiles
European Sex Workers' Rights Alliance Report, September 2023

Callisto Vault: A Cryptographic Approach for Detecting Victims of Serial Perpetrators of Sexual Assault
Scott MacDonald, **Lucy Qin**, Mayank Varia
Technical White Paper (Published by Callisto), July 2023

Outside Looking In: Approaches to Content Moderation in End-to-End Encrypted Systems
Seny Kamara, Mallory Knodel, Emma Llansó, Greg Nojeim, **Lucy Qin***, Dhanaraj Thakur, Caitlin Vogus
Center for Democracy & Technology Report, August 2021

Policy Responses

Formal Response on the Development of an Artificial Intelligence (AI) Action Plan (2025)
Elissa M. Redmiles, **Lucy Qin**, Allison McDonald

Formal Response to Meta Oversight Board: "Explicit AI Images of Female Public Figures" (2024)
Lucy Qin, Sarah Adel Bargal, Elissa M. Redmiles, Lisa Singh

Formal Response to NIST AI 100-4 on Reducing Risks Posed by Synthetic Content (2024)
Elissa M. Redmiles, Sarah Adel Bargal, Ana-Maria Cretu, Asia Eaton, Amy Hasinoff, Sophie Hawkes, Allison McDonald, **Lucy Qin**, Carmela Troncoso

Formal Response to NIST's Request for Information on the AI Executive Order (2024)
Elissa M. Redmiles, Sarah Adel Bargal, Grace (Natalie) Brigham, Nina Grgić-Hlača, Tadayoshi Kohno, Jaron Mink, Veronica A. Rivera, Carmela Troncoso, **Lucy Qin**, Miranda Wei

Formal Comment to the FTC on Commercial Surveillance and Data Security (2022)
Lizzie Kumar, Leah Namisa Rosenbloom, **Lucy Qin**, Suresh Venkatasubramanian

Funding

Google Grant on Non-Consensual Intimate Imagery
Principal Investigator, Invited Submission, $100k, 2026

Fritz Fellowship, Georgetown University
Fellow & Co-PI, ∼2 Years of Postdoctoral Funding, 2 Years of Undergrad Research Assistant Funding, 2025

NSF-DFG: SaTC: CORE: Small: Requirements, Metrics, and Tools for Effective User Transparency (Award #2344940)
Contributor, Co-Wrote Task 2 of 3 (Transparency Metrics and Tools) with Co-PI Elissa M. Redmiles, 2024

NSF Graduate Research Fellowship
Fellow, 3 Years of Ph.D. Funding, 2020

Invited & Contributed Talks

Stop the Nonconsensual Use of Nude Images in Research
- Digital Trust and Information Law Lab (New York University), October 2025

User Perspective of PETs (Privacy-Enhancing Technologies)
- Panelist, Dagstuhl Seminar #25112: PETs and AI: Privacy Washing and the Need for a PETs Evaluation Framework, March 2025

Technical Perspectives and Challenges of Intimate Image Abuse
- International Conference on Online Violence Against Women, hosted by B.a.B.e., January 2025

Safe(r) Digital Intimacy: Evidence-Based Recommendations to Reduce Image-Based Sexual Abuse
- Google, November 2023

Where Do Threat Models Come From? Challenging Implicit Assumptions
- Workshop on Hot Topics in Privacy Enhancing Technologies (HotPETs), July 2023

"Did They F*ing Consent to That?": Technical Approaches to Reduce Image-Based Sexual Abuse**
- Presented a version of this work to the White House Gender Policy Council, September 2022
- Presented remarks based on this research at an invitation-only listening session held by the Department of Health & Human Services, December 2024
- Workshop on Security and Human Behavior (SHB), June 2024
- Capital-Area Colloquium on Trustworthy and Usable Security/Privacy, December 2024

Outside Looking In: Approaches to Content Moderation in End-to-End Encrypted Systems
- Panelist, CSAIL Security Seminar (Massachusetts Institute of Technology), November 2021

A Decentralized and Encrypted National Gun Registry
- Center for Information Technology Policy Seminar (Princeton University), September 2021
- Advanced Research in Cryptography Lab (Johns Hopkins University), September 2021
- Security Group Seminar (Boston University), September 2021
- Brave Research, November 2021
- Cryptography Seminar (University of Illinois at Urbana-Champaign), November 2021

Deploying MPC for Social Good
- Real World Crypto, January 2019

Leadership & Advisory Roles

Co-Lead (2023–Present), SafeDigitalIntimacy.org
- Research collective of computer scientists, clinical psychologists, and community experts focused on technology and sexual violence

Cryptography Advisory Board Member (2018–Present), Callisto
- Nonprofit that supports survivors of sexual assault

Working Groups

Member (July 2024–Present), Multistakeholder Working Group to Address NCII
- Convened by the Center for Democracy & Technology, the Cyber Civil Rights Initiative, and the National Network to End Domestic Violence

Expert Consultative Group Member (October 2026–May 2027), Model National Framework for Addressing Non-Consensual Intimate Images
- Convened by the UK Foreign, Commonwealth & Development Office, UN Women, UNODC, Global Partnership for Action on Gender-Based Online Harassment and Abuse, SWGfL, and StopNCII.org

Co-Organizer (Fall 2021–Fall 2022), Community-Driven Cryptography Project
- Interdisciplinary group for exploring how cryptography intersects with society to design and create technical solutions that account for their real-world social impact

Co-Organizer (Spring 2021; Member since Fall 2020), Mechanism Design for Social Good (MD4SG) Data Economies & Data Governance Working Group
- Working group examining challenges across the data pipeline, from data creation, ownership, and sharing to analysis and use

Professional Service

Program Committee Member, USENIX Security Symposium, 2025 & 2026
Program Committee Member, Privacy Enhancing Technologies Symposium (PETS), 2025
Program Committee Member, ACM Fairness, Accountability, and Transparency (FAccT), 2023
Program Committee Member, ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO), 2021 & 2023
Program Committee Member, Workshop on Inclusive Privacy and Security (WIPS) at USENIX SOUPS, 2021
Reviewer, Stanford Journal of Online Trust and Safety (JOTS), 2025
External Reviewer, Privacy Enhancing Technologies Symposium (PETS), 2023
Publicity Chair, IEEE Secure Development Conference (SecDev), 2018 & 2019

Departmental Service

Department of Computer Science, Brown University Ph.D. Admissions Committee (2023); Diversity Committee (2021–2022); Ph.D. Mentor (2021, 2023); Co-Organizer, Admitted Students Week (2020, 2021) and Application Feedback Program for Underrepresented Applicants (2020)

Press

Selected coverage discussing the technical components or findings of my research.

AI companion apps are a nonconsensual nightmare, Indicator, 2026

Can a new form of cryptography solve the internet's privacy problem?, The Guardian, 2022

This Encrypted Gun Registry Might Bridge a Partisan Divide, WIRED, 2021

An Online Tool to Catch Workplace Sexual Predators, The Wall Street Journal, 2019

Armed with data, the Boston Women's Workforce Council takes on the gender wage gap, The Boston Globe, 2019

How Smartphone Apps Could Change The Way Sexual Assault Is Reported, All Things Considered, NPR, 2018

The articles below are not tied to a specific research publication but include quotes from me.

Flock is just the latest example of using surveillance to stalk women, The 19th, 2026

Police caught one of the web's most dangerous paedophiles. Then everything went dark, WIRED, 2021

Open-Source Code Contributions

web-mpc. Web platform for privacy-preserving data aggregation using secure multi-party computation (MPC), deployed by the Boston Women's Workforce Council and others

JIFF. JavaScript library for building web-based applications that employ MPC

oprf. JavaScript library for oblivious pseudorandom functions over an elliptic curve (Ristretto255)

Callisto Crypto Demo. Prototype of components of Callisto's cryptographic approach

constellation-js. JavaScript library for combinatorially specifying, constraining, and exploring genetic design spaces

Teaching Experience

Teaching Roles

Co-Instructor *Fall 2021*
Algorithms for the People (CSCI 1952-V), *Brown University*

Instructor *Summer 2021 & Summer 2022*
Hiding in Plain Sight: An Introduction to the Art of Cryptography, *Brown Pre-College Program*

Teaching Assistant *Spring 2015*
Web Programming, *Tufts University*

Guest Lectures

Stop the Nonconsensual Use of Nude Images *March 2026*
Computer Security Ethics (COSC 4715), *Georgetown University*

Cryptography Basics *January 2025*
Sociotechnical Security (COSC 3720), *Georgetown University*

Educational Outreach

Privacy Through Cryptography *November 2024 & November 2025*
Massive Data Institute, McCourt School of Public Policy, Georgetown University

- Interactive workshop on the basics of cryptography for Georgetown students and staff

Volunteer Instructor, Code Creative (MIT Lincoln Lab) *2017–2019*

- Contributed to the curriculum and teaching of a semester-long introductory computer science course for high school students

Professional Experience

Technical Consultant — *Fall 2020 & Spring 2026*
Center for Democracy & Technology

Visiting Scholar — *Summer 2022*
Max Planck Institute for Software Systems

Research Software Engineer — *September 2017–August 2019*
Hariri Institute for Computing at Boston University

Assistant Technical Staff (Research Software Engineer) — *October 2015–August 2017*
MIT Lincoln Laboratory
Humanitarian Assistance and Disaster Relief Systems Group
Secure, Resilient Systems & Technologies Group