# ANANTA SONEJI

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Security Engineering for Future Computing (SEFCOM) Laboratory BYENG 469, 699 S Mill Ave, Tempe, AZ 85281

## **EDUCATION**

### Doctor of Philosophy in Computer Science

2019 - 2026

Ira A. Fulton School of Engineering, Arizona State University (ASU)

Advisor: Dr. Adam Doupé

Thesis: Exploring Human Dimensions Amid Systemic Transformations in Cybersecurity

## Master of Computer Science

2017-2019

Ira A. Fulton School of Engineering, Arizona State University

## Bachelor of Technology in Information and Communication Technology

2013-2017

(Honors with Minor in Computational Science)

Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), India

## **PUBLICATIONS**

[peer-reviewed, Google Scholar Link]

An asterisk (\*) indicates co-first authorship: these authors contributed equally to the work.

- P9. Zion Leonahenahe Basque, Samuele Doria, **Ananta Soneji**, Wil Gibbs, Adam Doupé, Yan Shoshitaishvili, Eleonora Losiouk, Ruoyu Wang, and Simone Aonzo, *Decompiling the Synergy: An Empirical Study of Human–LLM Teaming in Software Reverse Engineering*, in Proceedings of the Symposium on Network and Distributed System Security (NDSS), Feb 2026. (acceptance rate: TBA)
- P8. Souradip Nath, **Ananta Soneji**, Jaejong Baek, Carlos Rubio-Medrano, and Gail-Joon Ahn, *Towards Collaboration-Aware Resource Sharing in Research Computing Infrastructures*, in Proceedings of the 11th IEEE International Conference on Collaboration and Internet Computing (IEEE CIC'25), Pittsburgh, PA, Nov 2025. (acceptance rate: TBA)
- P7. Souradip Nath\*, Ananta Soneji\*, Jaejong Baek, Tiffany Bao, Adam Doupé, Carlos Rubio-Medrano, and Gail-Joon Ahn, "It's almost like Frankenstein": Investigating the Complexities of Scientific Collaboration and Privilege Management within Research Computing Infrastructures, in Proceedings of the 46th IEEE Symposium on Security and Privacy (Oakland), San Francisco, CA, May 2025. (acceptance rate: 14.8%)
- P6. Easton Kelso, **Ananta Soneji**, Sazzadur Rahaman, Yan Soshitaishvili, and Rakibul Hasan, *Trust, Because You Can't Verify: Privacy and Security Hurdles in Education Technology Acquisition Practices*, in Proceedings of the 2024 ACM SIGSAC Conference on Computer and Communications Security (CCS'24), Salt Lake City, UT, October 2024. (acceptance rate: 16.9%)
- P5. Ananta Soneji, Vaughn Hamilton, Adam Doupé, Allison McDonald, and Elissa M. Redmiles, "I feel physically safe but not politically safe": Understanding the Digital Threats and Safety Practices of OnlyFans Creators, in Proceedings of the 33st USENIX Security Symposium (USENIX Security'24), Philadelphia, PA, August 2024. (acceptance rate: 18.33%)
- P4. Irina Ford, **Ananta Soneji**, Faris Bugra Kokulu, Jayakrishna Vadayath, Zion Leonahenahe Basque, Gaurav Vipat, Adam Doupé, Ruoyu Wang, Gail-Joon Ahn, Tiffany Bao, and Yan Shoshitaishvili, "Watching over the shoulder of a professional": Why hackers make mistakes and how they fix them, in Proceedings of the 45th IEEE Symposium on Security and Privacy (Oakland), San Francisco, CA, May 2024. (acceptance rate: 17.8%)
- P3. Vaughn Hamilton, Ananta Soneji, Allison McDonald, and Elissa M. Redmiles, "Nudes? Shouldn't I charge for these?": Motivations of New Sexual Content Creators on OnlyFans, in Proceedings of the 2023 CHI conference on Human Factors in Computing Systems (CHI'23), Hamburg, Germany, April 2023. (acceptance rate: 27.6%)

  Phonorable Mention (Top 5%)

- P2. Ananta Soneji, Faris Bugra Kokulu, Carlos Rubio-Medrano, Tiffany Bao, Ruoyu Wang, Yan Shoshitaishvili, and Adam Doupé, "Flawed, but like democracy we don't have a better system": The Experts' Insights on the Peer Review Process of Evaluating Security Papers, in Proceedings of the 43rd IEEE Symposium on Security and Privacy (Oakland), San Francisco, CA, May 2022. (acceptance rate: 14.52%)
- P1. Faris Bugra Kokulu, **Ananta Soneji**, Tiffany Bao, Yan Shoshitaishvili, Ziming Zhao, Adam Doupé, and Gail-Joon Ahn, *Matched and Mismatched SOCs: A Qualitative Study on Security Operations Center Issues*, in Proceeding of the 26th ACM Conference on Computer and Communications Security (CCS), London, UK, November 2019. (acceptance rate: 16%)

## SHORT PAPERS

S1. Easton Kelso, **Ananta Soneji**, Syed Zami-Ul-Haque Navid, Yan Soshitaishvili, Sazzadur Rahaman, and Rakibul Hasan, *Investigating the Security & Privacy Risks from Unsanctioned Technology Use by Educators*, in Extended Abstracts of the CHI conference on Human Factors in Computing Systems (CHI EA'25), Yokohama, Japan, May 2025.

## CONFERENCE TALKS

- T2. "I feel physically safe but not politically safe": Understanding the Digital Threats and Safety Practices of OnlyFans Creators
  - 33st USENIX Security Symposium (USENIX Security'24), Philadelphia, PA, August 2024.
- T1. "Flawed, but like democracy we don't have a better system": The Experts' Insights on the Peer Review Process of Evaluating Security Papers
  - 43rd IEEE Symposium on Security and Privacy (Oakland), San Francisco, CA, May 2022.

## POSTER PRESENTATIONS

- W2. Investigating the Security & Privacy Risks from Unsanctioned Technology Use by Educators
  Twenty-First Symposium on Usable Privacy and Security (SOUPS 2025), Seattle, WA, August 2025.
- W1. Trust, Because You Can't Verify: Privacy and Security Hurdles in Education Technology Acquisition Practices Twenty-First Symposium on Usable Privacy and Security (SOUPS 2025), Seattle, WA, August 2025.

#### PROFESSIONAL SERVICE

Program Committee Member	
• The ACM Conference on Computer and Communications Security (CCS)	2026
• Symposium on Usable Security and Privacy (USEC), Co-located with NDSS'26	2026
<ul> <li>Workshop on Cyber Security Experimentation and Test (CSET), Co-located with the Annual Computer Security Applications Conference (ACSAC)</li> </ul>	2025
• IEEE Secure Development Conference (SecDev)	2025
• Symposium on Usable Security and Privacy (USEC), Co-located with NDSS'25	2025
• Workshop on Cyber Security Experimentation and Test (CSET), Co-located with USENIX Security'24	2024
• Workshop on Cyber Security Experimentation and Test (CSET), Co-located with USENIX Security'23	2023
Poster Jury	
• Symposium on Usable Privacy and Security (SOUPS), Co-located with USENIX Security'25	2025
• Symposium on Usable Privacy and Security (SOUPS), Co-located with USENIX Security'24	2024
External Reviewer	
• The ACM CHI conference on Human Factors in Computing Systems (CHI)	2024

## WORKSHOP & CONFERENCE ORGANIZATION

Chair, Workshop on Meta-Science and Critical Reflections in Security and Privacy (MetaCRiSP) IEEE Symposium on Security and Privacy (Oakland), San Francisco

2026

Junior Co-chair, Mentoring Session.

Symposium on Usable Privacy and Security (SOUPS), Co-located with USENIX Security'22

2022

#### MENTORING EXPERIENCE

#### Ph.D. Students

- Souradip Nath, ASU mentored on qualitative methods for investigating human-system interactions for experiences, pain points, and improvements; co-first author on paper P7.
- Irina Ford, ASU mentored on second-hand data collection (YouTube videos) and qualitative analysis and coding practices; co-authored paper P4.

### **Undergraduate Students**

• Easton Kelso, ASU - introduced to human factors cybersecurity research, mixed-methods research, and open coding; co-authored paper P6 and late-breaking work S1.

## High School Students, CTF High School Internship Program at ASU

- Summer 2025 Mentored three students on end-to-end human factors cybersecurity research, including data collection, a combination of manual and large language models (LLM)-assisted analysis, and results reporting. Projects focused on (1) multi-stakeholder perspectives on education technology data breaches (PowerSchool case study), (2) user concerns related to VR safety and privacy (Meta Quest) on Reddit, and (3) motivations and security and privacy concerns in TikTok discussions of using Generative AI (GenAI) chatbots for self-reflection and therapy; resulted in three individual poster presentations.
- Summer 2024 Mentored two students on digital safety and privacy research, focusing on (1) changes in online behaviors from adolescence to young adulthood, and (2) discourse on platforms such as Reddit about young adults' online safety and privacy; resulted in two individual poster presentations and a news feature.

## TEACHING EXPERIENCE

• Teaching Assistant, CSE 365: Introduction to Information Assurance, ASU

Spring 2021

• Teaching Assistant, CSE 110: Principle of Programming (Java), ASU

Fall 2017

## RESEARCH EXPERIENCE

#### Applied ELSI Research Intern

Sage Bionetworks, Advisor: Megan Doerr

Spring 2023
Remote

- For the NIH All of Us Research Program, I was selected to evaluate data collection processes and identify frictions between stakeholders and participants, uncovering inefficiencies and opportunities for improvement.
- Led interactive remote focus groups using *Miro* and *Zoom* with program stakeholders to identify community sourced metrics and derive novel evaluation criteria for development and testing.
- Conducted qualitative analysis of seven focus groups (90 minutes each) using Delve, systematically coding data and sharing findings through reports and presentations to inform project decisions.

Research Intern Spring 2022

Max Planck Institute for Software Systems, Advisor: Dr. Elissa M. Redmiles

Saarbrücken, Germany

- Synthesized literature on marginalized "at-risk" populations, stigma, and digital security and privacy to inform the study's analytical framework and guide thematic analysis.
- Developed a code-system in MAXQDA by iteratively open-coding the interviews with OnlyFans creators, identifying key themes on motivations, business models, threat models, and safety strategies.

• Published **two top-tier conference papers**: motivations of OnlyFans creators new to sex work in joining the platform and sharing sexual content (P3) and digital threats and safety practices of creators (P5).

Research Intern Summer 2015

DA-IICT, Advisor: Dr. Bhaskar Chaudhury

Gandhinagar, India

- Developed an interactive visualization tool, Motion Charts, using D3.js to analyze and infer patterns from complex, scientific datasets.
- Conducted two case studies for log analysis: (1) student performance data derived from an academic database, and (2) environmental attributes of countries worldwide.

#### INDUSTRY EXPERIENCE

### Corporate Relations Intern, PlexusMD, India

Spring 2017

- Coordinated a nation-wide professional matching system by facilitating communication with doctors across diverse specializations and educational backgrounds, verifying credentials and qualifications, and matching job requirements from hospitals with suitable candidates.
- Conducted in-person and online outreach to publicize the platform nationwide; visiting hospitals to encourage posting of open positions and engaging with medical schools to connect with potential graduates.

## GRANTS & FELLOWSHIPS

• Student Travel Grant, SOUPS (\$1,100)

2025

• University Graduate Fellowship, ASU (\$4,500)

2025

• Engineering Graduate Fellowship, ASU (\$5,000)

2025, 2020, 2019, and 2018

• SUN Award, ASU

2017

#### **INVITATIONS**

• Invited Participant, NSF SaTC Aspiring PI Workshop, hosted at George Washington University Selected for the invite-only NSF SaTC Aspiring PI Workshop; SaTC is the NSF's flagship program for Computer Security and Privacy

forthcoming

• Guest Lecturer, Indiana University, Bloomington
Invited to give a lecture on "Navigating Human Dimensions of Systemic Change in
Cybersecurity" for a graduate-level class

forthcoming

## COMMUNITY OUTREACH

• Research Mentor, The SCience and ENgineering Experience (SCENE) Program, ASU Mentoring one high-school intern

2025-2026

• Panelist, ACM Student Chapter, ASU

Topic: Getting into Research Early (Pre-Doctoral)

Fall 2025

• Mentor, CTF High School Intern Program, ASU Mentored three high-school interns

Summer 2025

• Speaker, CTF High School Intern Program, ASU
Topic: Designing "Good" Research Project Posters for high school interns

Summer 2025

• Mentor, CTF High School Intern Program, ASU Mentored two high-school interns

Summer 2024

# REFERENCES

# Dr. Adam Doupé

Associate Professor, ASU doupe@asu.edu Ph.D. Advisor

# Dr. Gail-Joon Ahn

Professor, ASU gahn@asu.edu Institutional Research Collaborator

## Dr. Rakibul Hasan

Assistant Professor, ASU rhasan3@asu.edu Institutional Research Collaborator