

# ANANTA SONEJI

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Security Engineering for Future Computing (SEFCOM) Laboratory  
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## EDUCATION

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- Doctor of Philosophy in Computer Science** 2019–2026  
Ira A. Fulton School of Engineering, Arizona State University (ASU)  
Advisor: Dr. Adam Doupé  
Thesis: *Uncovering Human and Organizational Dynamics of Cybersecurity Systems in Practice*
- 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]

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

- P11. Michael Tompkins, Nihaarika Agarwal, **Ananta Soneji**, Robert Wasinger, Connor Nelson, Kevin Leach, Rakibul Hasan, Adam Doupé, Daniel Votipka, Yan Shoshitaishvili, and Jaron Mink, *Do Hackers Dream of Electric Teachers?: A Large-Scale, In-Situ Evaluation of Cybersecurity Student Behaviors and Performance with AI Tutors* (arXiv)
- P10. Yi Jou Li, Zeming Yu, James A. Mattei, **Ananta Soneji**, Zhibo Sun, Ruoyu Wang, Jaron Mink, Daniel Votipka, and Tiffany Bao. *I Can SE Clearly Now: Investigating the Effectiveness of GUI-based Symbolic Execution for Software Vulnerability Discovery*, in Proceedings of the 2026 CHI conference on Human Factors in Computing Systems (CHI), Barcelona, Spain, April 2026. (acceptance rate: 25.3%)
- 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: 17.89%)  
 Distinguished Paper Award
- 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), Pittsburgh, PA, Nov 2025.
- 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), 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 33rd USENIX Security Symposium (USENIX Security), 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), Hamburg, Germany, April 2023. (acceptance rate: 27.6%)  
 **Honorable 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

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- 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), Yokohama, Japan, May 2025.

## CONFERENCE TALKS

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- 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), 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

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- 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

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### 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
- Workshop on Cyber Security Experimentation and Test (CSET), Co-located with the Annual Computer Security Applications Conference (ACSAC) 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

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### 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 2022

## MENTORING EXPERIENCE

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### 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

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- Teaching Assistant, CSE 365: Introduction to Information Assurance, ASU Spring 2021
- Teaching Assistant, CSE 110: Principle of Programming (Java), ASU Fall 2017

## RESEARCH EXPERIENCE

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### Research Intern

Max Planck Institute for Software Systems, Advisor: Dr. Elissa M. Redmiles Spring 2022  
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

DA-IICT, Advisor: Dr. Bhaskar Chaudhury Summer 2015  
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

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**Applied ELSI Research Intern** Spring 2023  
 Sage Bionetworks, Advisor: [Megan Doerr](#) *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.

**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, & RECOGNITIONS

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- 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

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- **Invited Participant**, NSF SaTC Aspiring PI Workshop *December 2025*  
 Selected for the invite-only NSF SaTC Aspiring PI Workshop;  
 SaTC is the NSF's flagship program for Computer Security and Privacy  
*Host: George Washington University*
- **Guest Talk**, Indiana University, Bloomington *December 2025*  
 Invited to give a lecture for a graduate-level seminar class  
*Topic: Exploring Human Factors Amid Systemic Security Transformations*  
*Host: Dr. Cici Ling*

## SCHOOL & UNIVERSITY SERVICE

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- **Research Mentor**, The SCience and ENgineering Experience (SCENE) Program, ASU 2025–2026  
 Mentoring one high-school intern
- **Panelist**, ACM Student Chapter, ASU Fall 2025  
*Topic: Getting into Research Early (Pre-Doctoral)*
- **Research Mentor**, CTF High School Intern Program, ASU Summer 2025  
 Mentored three high-school interns
- **Speaker**, CTF High School Intern Program, ASU Summer 2025  
*Topic: Designing “Good” Research Project Posters for high school interns*
- **Research Mentor**, CTF High School Intern Program, ASU Summer 2024  
 Mentored two high-school interns

## REFERENCES

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**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

**Dr. Carlos Rubio-Medrano**

Assistant Professor, Texas A&M University - Corpus Christi  
carlos.rubiomedrano@tamucc.edu  
External Research Collaborator

**Dr. Sazzadur Rahaman**

Assistant Professor, University of Arizona  
sazz@cs.arizona.edu  
External Research Collaborator