# Elijah Bouma-Sims

eboumasi@andrew.cmu.edu

https://elijahboumasims.com

in https://www.linkedin.com/in/elijah-bouma-sims

#### **Education**

2021 – Present Ph.D. Societal Computing, Carnegie Mellon University.

2021 – 2023 M.S. Societal Computing, Carnegie Mellon University

2017 – 2021 **B.S. Computer Engineering, B.A History**, North Carolina State University

#### Research Experience

Supervisor: Dr. Lorrie Cranor

Conduct research on a variety of topics in usable security and privacy, with a focus on at-risk populations; supervise undergraduate research assistants; presented research results at CHI

2023, SOUPS 2024, PETS 2024, and NDSS 2025.

05/2021 – 08/2021 Research Assistant, Max Planck Institute for Security and Privacy. Bochum, DE.

Supervisor: Dr. Yasemin Acar

Conducted research on gender data practices among developers that was presented at PEPR

2022 and CSCW 2023.

08/2019 – 05/2021 Research Assistant, North Carolina State University. Raleigh, NC, USA

Supervisor: Dr. Brad Reaves

Contributed as an author to measurement study on robocalls and analysis of account remediation advice presented at USENIX Security 2020 and SOUPS 2021, respectively; conducted a measurement study on YouTube scams that I presented at MADWeb 2021.

## **Teaching Experience**

11/2022 – Present **Future Faculty Program**, Carnegie Mellon University. Pittsburgh, PA, USA

Attend regular seminars on pedagogy; I have completed a syllabus design project, multiple teaching observations, and other activities to practice teaching skills.

04/2023 – Present Guest Lecturer, Carnegie Mellon University. Pittsburgh, PA, USA

Course: Engineering Privacy in Software (19-605)

Developed and routinely deliver lectures on using Consent Management Platforms.

08/2024 – 12/2024 **Teaching Assistant**, Carnegie Mellon University. Pittsburgh, PA, USA

Course: Privacy Policy, Law and Technology (17-733)

Held office hours, wrote course materials, and graded assignments; developed and delivered lectures on "Privacy for At-risk Populations" and "Privacy Notice and Choice"

o1/2024 – 05/2024 Head Teaching Assistant, Carnegie Mellon University. Pittsburgh, PA, USA Course: Usable Privacy and Security (17-734)

Held office hours, wrote course materials, graded assignments, and managed other teaching assistants; developed and delivered a lecture on "Statistics for User Studies."

### **Other Work Experience**

05/2020 — 07/2020	▼ Technical Intern, Cisco. Raleigh, NC, USA Worked on the Security Automation and Visibility team to improve dependency scanning tools
06/2019 — 08/2019	■ <b>Technical Intern</b> , SAS. Cary, NC, USA Worked on the Development and Life-cycle Testing team to automate tests for SAS enterprise software.
01/2018 — 12/2018	Writing Assistant, North Carolina State University. Raleigh, NC, USA Tutored undergraduate students in writing at the University Tutorial Center
05/2018 — 06/2018	Residential Engineering Camp Counselor, North Carolina State University. Raleigh, NC, USA  I was responsible for a group of 20 high school rising juniors and seniors each week of camp; I planned and implemented a variety of social and recreational activities.

#### **Publications**

#### **Conference / Workshop Proceedings**

- **E. Bouma-Sims**, S. Ananda Kumar, and L. Cranor, "Exploring the privacy experiences of closeted users of online dating services in the us," in *Proceedings on Privacy Enhancing Technologies*, 2024. ODI: 10.56553/popets-2024-0046.
  (Online]. Available: https://doi.org/10.56553/popets-2024-0046.
- S. Jiwani, R. Sasheendran, A. Abhyankar, **E. Bouma-Sims**, and L. Cranor, "Crumbling cookie categories: Deconstructing common cookie categories to create categories that people understand," in *Proceedings on Privacy Enhancing Technologies*, 2024. ODI: 10.56553/popets-2024-0093. Online]. Available: https://doi.org/10.56553/popets-2024-0093.
- **E. Bouma-Sims** and Y. Acar, "Beyond the boolean: How programmers ask about, use, and discuss gender," in *Proceedings of the 2023 ACM SIGCHI Conference on Computer-Supported Cooperative Work & Social Computing*, New York, NY, USA: Association for Computing Machinery, 2023. DOI: 10.1145/3579461. [Online]. Available: https://doi.org/10.1145/3579461.
- **E. Bouma-Sims**, M. Li, Y. Lin, A. Sakura-Lemessy, A. Nisenoff, E. Young, E. Birrell, L. F. Cranor, and H. Habib, "A US-UK usability evaluation of consent management platform cookie consent interface design on desktop and mobile," in *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, Hamburg, Germany: Association for Computing Machinery, 2023, ISBN: 9781450394215. ODI: 10.1145/3544548.3580725.
- 8 L. Neil, **E. Bouma-Sims**, E. Lafontaine, Y. Acar, and B. Reaves, "Investigating web service account remediation advice," in *Seventeenth Symposium on Usable Privacy and Security (SOUPS 2021)*,

https://www.usenix.org/conference/soups2021/presentation/neil, USENIX Association, Aug. 2021, pp. 359-376, ISBN: 978-1-939133-25-0.

- **E. Bouma-Sims** and B. Reaves, "A first look at scams on youtube," in *The 2021 Workshop on Measurements, Attacks, and Defenses for the Web*, https://dx.doi.org/10.14722/madweb.2021.23001, 2021, ISBN: 1-891562-67-3.
- S. Prasad, **E. Bouma-Sims**, A. K. Mylappan, and B. Reaves, "Who's calling? characterizing robocalls through audio and metadata analysis," in *20th USENIX Security Symposium (USENIX Security 20)*, https://www.usenix.org/conference/usenixsecurity20/presentation/prasad, USENIX Association, Aug. 2020,

#### **Posters / Presentations**

pp. 397-414, ISBN: 978-1-939133-17-5.

- **E. Bouma-Sims**. "The kids are all right: Investigating the susceptibility of teens and adults to youtube giveaway scams." (Sep. 2024). Presented at the 2024 CyLab Partners Conference https://www.cylab.cmu.edu/events/partners\_conference/2024/index.html.
- **E. Bouma-Sims**. "Exploring the privacy experiences of closeted users of online dating services in the us." (Apr. 2024). Presented at CMU's Current Topics in Privacy Seminar https://privacy.cs.cmu.edu/masters/seminar/index.html.
- **E. Bouma-Sims**. "A US-UK usability evaluation of consent management platform cookie consent interface design on desktop and mobile." (Mar. 2023). Presented at CMU's Current Topics in Privacy Seminar https://privacy.cs.cmu.edu/masters/seminar/index.html.
- **E. Bouma-Sims**, J. Gursky, S. Kumar, R. Stevens, J. Tesfa, S. Yan, and L. F. Cranor. "Poster: Out of their control: Investigating privacy attitudes and behaviors among tinder users." (Aug. 2022). Presented at the 2022 USENIX Symposium on Usable Privacy and Security in Boston, MA.

https://www.usenix.org/conference/soups2022/presentation/bouma-sims-poster.

**E. Bouma-Sims**. "How developers (don't) think about gender privacy," USENIX Association. (Jun. 2022). Presented at the 2022 USENIX Conference on Privacy Engineering Practice and Respect in Santa Clara, CA. https://www.usenix.org/conference/pepr22/presentation/bouma-sims.

#### **Awards and Achievements**

- Andreas Pfitzmann Best Student Paper Award Runner up for "Exploring the Privacy Experiences of Closeted Users of Online Dating Services in the US," 24th Privacy Enhancing Technologies Symposium
- 2023 Presidential Fellowship, Carnegie Mellon University, CyLab
- Outstanding Senior Award for the Humanities, North Carolina State University, College of Engineering.
  - **Best Paper Runner-up** for "A First Look at Scams On YouTube," Workshop on Measurements, Attacks, and Defenses for the Web 2021
- Internet Defense Award for "Who's Calling? Characterizing Robocalling Campaigns through Audio and Metadata Analysis," 29th USENIX Security Symposium
  - **Distinguished Paper Award** for "Who's Calling? Characterizing Robocalling Campaigns through Audio and Metadata Analysis," 29th USENIX Security Symposium
- 2018 Undergraduate Research Grant, North Carolina State University
- Park Scholarship, North Carolina State University

### **Academic Service**

2022-2024

- CHI External Reviewer, the 2023, 2024, and 2025 SIGCHI Conference on Human Factors in Computing Systems
- **CSCW External Reviewer**, the 25th, 26th, and 28th ACM SIGCHI Conference on Computer-Supported Cooperative Work & Social Computing
- **SOUPS Poster Jury**, The 18th. 19th, and 20th Symposium on Usable Privacy and Security

2024

- **CCS Artifact Evaluation Committee**, the 31st ACM Conference on Computer and Communications Security
- Reviewer for Scientific Reports and Interacting with Computers

### **Other Service Activites**

2024-Present

- **Student Seminar Committee Member**, Cylab, Carnegie Mellon University
- **Community Committee Member**, Cylab, Carnegie Mellon University

2022-Present

■ **TechNights Volunteer and Session Lead**, Women@SCS, Carnegie Mellon University Volunteer for a free STEM outreach program targeting female students from grades 6-8; developed and taught session on ethical hacking

2022-2025

**REUSE Admissions Committee Member**, Carnegie Mellon's Research Experiences for Undergraduates in Software Engineering

2022-2024

OurCS Volunteer, School of Computer Science, Carnegie Mellon University

Team mentor for the 3-day OurCS undergraduate research workshop in 2022 and 2024

2021-2022

Joint Financial Committee Member, Carnegie Mellon Student Government

2019-2021

■ **Diversity Committee Member**, Park Scholarship Program, North Carolina State University

2017-2021

Krispy Kreme Challenge Committee Member
Student-run charity race benefiting UNC Children's Hospital

#### **Skills**

Coding

Python, C++, C, R, 上下X, HTML, CSS, JavaScript, Dafny

Other tech.

OneTrust CMP, Wireshark, AFL++, GDB, Valgrind, Infer, Apache, Docker

Research

Experimental design, qualitative analysis, statistical analysis, internet measurement, humansubjects research, academic writing, public speaking

Teaching

Lesson planning, active learning strategies, learning management systems, mentoring students