Updated: 5/12/23

Sauvik Das, Ph.D. — Curriculum Vitae

https://sauvik.me | sauvik@cmu.edu

Professional appointments

Carnegie Mellon University Human-Computer Interaction Institute	Assistant Professor	September 2022—Present
Georgia Institute of Technology School of Interactive Computing	Adjunct Professor	September 2022—Present
	Assistant Professor	January 2018—August 2022

Selected Honors and Awards

Artifact awards:

- UbiComp Best Paper [UbiComp'13]
- SOUPS Distinguished Paper Award [SOUPS'20]
- NSA Best Scientific Cybersecurity Paper Award – Honorable Mention [CCS'14]
- CHI Best Paper Honorable Mention x3 [CHI'16, CHI'17, CHI'20]
- CSCW Best Paper Honorable Mention [CSCW'21b]
- Most Innovative Video Nomination, AAAI Video Competition [CIG'11]

Competitive fellowships and personal recognitions:

- Center for Democracy and Technology, Non-Resident Fellow (2023)
- NSF EAPSI Fellowship (2016)
- Qualcomm Innovation Fellowship (2014)
- National Defense Science and Engineering Graduate Fellowship (2012-15)
- Stu Card Graduate Fellowship (2011-12)
- CMU CyLab CUPS Doctoral Training Program Fellowship (2011-13)

Grants & Competitive Gifts

Total raised as PI: $2,573,465

2023	Oracle Research	PI	Prixel: A mobile camera application to facilitate end-user use of human-centered adversarial machine learning	$70,000 OCI credits
2023	CMU Secure Blockchain	PI	Modeling end-user barriers to self-custodying cryptocurrency assets (w/ Jason Hong, CMU)	$5,000
2023	CMU CyLab	PI	Robust, causal estimates of social influence on security behavior (w/ Laura Dabbish, CMU)	$50,000
2022	NSF	PI	*CAREER: Resisting Automated Algorithmic Surveillance with Human-Centered Adversarial Machine Learning* (sole PI) — Funded	$593,922

2021	NSF	PI	*Collaborative: SaTC: CORE: Medium:* Privacy Through Design: A Design Methodology to Promote the Creation of Privacy-Conscious Consumer AI (w/ Jodi Forlizzi, CMU) — Funded	$1,199,651 *($669,163)
2020	NSF	PI	*SaTC: CORE: Small:* Corporeal Cybersecurity: Improving End-User Security and Privacy with Physicalized Computing Interfaces (w/ Gregory Abowd, Georgia Tech & Northeastern University) — Funded	$499,892
2019	Facebook	PI	Explainable Ads: Improving Ad Targeting Transparency with Explainable AI (sole PI) — Funded	$50,000
2018	NSF	PI	*CRII: SaTC:* Systems That Facilitate Cooperation and Stewardship to Improve End-User Security Behaviors (sole PI) — Funded	$175,000

* indicates portion specifically allocated to Das where applicable

Academic Training & Education

Carnegie Mellon University, 2011-2017
M.S. / Ph.D. in Human-Computer Interaction
Advisers: Dr. Jason I. Hong and Dr. Laura A. Dabbish

University of Tokyo, 2016
Visiting Student Researcher (as part of NSF EAPSI Grant)
Adviser: Dr. Koji Yatani

Georgia Institute of Technology, 2006-2011
B.S. Computer Science—Media and Intelligence Threads
Adviser: Dr. Mark O. Riedl

Nanyang Technological University, 2008-2009
Exchange Student

Academic Publications

Google Scholar: http://scholar.google.com/citations?user=laPvCf4AAAAJ&hl=en&oi=ao

Semantic Scholar: https://www.semanticscholar.org/author/Sauvik-Das/37531797

Dblp: https://dblp.uni-trier.de/pers/hd/d/Das:Sauvik

† the publication was led by a direct advisee

Books

[FnT-S&P] **Sauvik Das**, Cori Faklaris, Jason I. Hong, and Laura Dabbish. The Security & Privacy Acceptance Framework (SPAF): A review of why users accept or reject cybersecurity and privacy best practices. *Foundations and Trends in Privacy and Security*. Vol 5, No. 1-2, pp. 1 – 143. 2022.

Accessible at: https://sauvikdas.com/papers/40/serve

Refereed Conference and Journal Papers

[SOUPS'23c] Zhixuan Kyrie Zhou, Tanushree Sharma, Luke Emano, **Sauvik Das**, and Yang Wang. Iterative Design of an Accessible Crypto Wallet for Blind Users. *To appear USENIX SOUPS 2023.*

[SOUPS'23b] Zhuohao Zhang, Smirity Kaushik, JooYoung Seo, Haolin Yuan, **Sauvik Das**, Leah Findlater, Danna Gurari, Abigale Stangl, and Yang Wang. ImageAlly: A Human-AI Hybrid Approach to Support Blind People in Detecting and Redacting Private Image Content. *To appear USENIX SOUPS 2023*

[SOUPS'23a] Smirity Kaushik, Nata Barbosa, Yaman Yu, Tanusree Sharma, Zak Kilhoffer, **Sauvik Das**, JooYoung Seo, and Yang Wang. GuardLens: Supporting Safer Online Browsing for People with Visual Impairments. *To appear USENIX SOUPS 2023*

[SEC'23] † Youngwook Do, Nivedita Arora, Ali Mirzazadeh, Injoo Moon, Eryue Xu, Zhihan Zhang, Gregory D. Abowd, and Sauvik Das. Powering for Privacy: Improving User Trust in Smart Speaker Microphones with Intentional Powering and Perceptible Assurance. *To appear USENIX SEC 2023*

[FAccT'23] † Yuxi Wu, Sydney Bice, W. Keith Edwards, and Sauvik Das. The Slow Violence of Surveillance Capitalism: How Online Behavioral Advertising Harms People. *To appear in Proceedings of the 6th annual ACM Conference on Fairness, Accountability, and Transparency (FAccT), 2023.*

Accessible at: https://sauvikdas.com/papers/42/serve

[Oakland'23] † Hao-ping (Hank) Lee, Jacob Logas, Stephanie Yang, Zhouyu Li, Nata Barbosa, Yang Wang, and **Sauvik Das**. When and Why Do People Want Ad Targeting Explanations? Evidence from a Four-Week, Mixed-Methods Field Study. *To appear in the 44th IEEE Symposium on Security & Privacy (Oakland), 2023.*

Accessible at: https://sauvikdas.com/papers/41/serve

[CHI'22b] † Yuxi Wu, W. Keith Edwards and **Sauvik Das**. "A reasonable thing to ask for": Towards a Unified Voice for Privacy Collective Action. *In Proceedings of the 40th SIGCHI Conference on Human Factors in Computing Systems (CHI), 2022* (Acceptance rate: 26%)

Accessible at: https://sauvikdas.com/papers/39/serve

[CHI'22a] Isadora Krsek, Kimi Wenzel, **Sauvik Das**, Laura Dabbish and Jason I. Hong. To Self-Persuade or Be Persuaded: Examining Interventions for Users' Privacy Setting Selection. *In Proceedings of the 40th SIGCHI Conference on Human Factors in Computing Systems (CHI), 2022.* (Direct acceptance rate: 13%)

Accessible at: https://sauvikdas.com/papers/38/serve

[CSCW'22] † P. Jacob Logas, Ari Schlesinger, Zhouyu Li and **Sauvik Das**. Image DePO: Towards Gradual Decentralization of Online Social Networks with Decentralized Privacy Overlays. *In Proceedings of the ACM on Human-Computer Interaction, CSCW, 2022.*

Accessible at: https://sauvikdas.com/papers/37/serve

[Oakland'22] † Yuxi Wu, W. Keith Edwards and **Sauvik Das**. SoK: Social Cybersecurity. *In Proceedings of the 43rd IEEE Symposium on Security & Privacy (Oakland), 2022.* (Acceptance rate: 15.4%)

Accessible at: https://sauvikdas.com/papers/36/serve

[IMWUT'22] † Youngwook Do, Jung Wook Park, Yuxi Wu, Avinandan Basu, Dingtian Zhang, Gregory D. Abowd and **Sauvik Das**. Smart Webcam Cover: Exploring the Design of an Intelligent Webcam Cover to Improve Usability and Trust. *In Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 2022.*

Accessible at: https://sauvikdas.com/papers/35/serve

[SEC'22] † Eyitemi Moju-Igbene, Hanan Abdi, Alan Lu and **Sauvik Das**. "How Do You Not Lose Friends?": Exploring the Design Space of Social Controls for Securing Shared Digital Resources Via Participatory Design Jams. *In Proceedings of the 31st USENIX Security Symposium (SEC), 2022.*

Accessible at: https://sauvikdas.com/papers/34/serve

[UIST'21] † Youngwook Do *, Siddhant Singh *, Zhouyu Li, Steven R Craig, Phoebe J Welch, Chengzhi Shi, Thad Starner, Gregory D. Abowd and **Sauvik Das**. Bit Whisperer: Improving Access Control over Ad-hoc, Short-range, Wireless Communications via Surface-bound Acoustics. *In Proceedings of the 34th ACM User Interface Software and Technology Symposium (UIST), 2021.* (Acceptance Rate: 26%)

* Authors contributed equally

Accessible at: https://sauvikdas.com/papers/33/serve

[CSCW'21b] † Sindhu Kiranmai Ernala, Stephanie Yang, Yuxi Wu, Rachel Chen, Kristen Wells and **Sauvik Das**. Exploring the Utility versus Intrusiveness of Dynamic Audience Selection on Facebook. *In Proceedings of the ACM on Human-Computer Interaction, 5 (CSCW3)*. 2021.

BEST PAPER HONORABLE MENTION

Accessible at: https://sauvikdas.com/papers/31/serve

[SOUPS'21] Zhuohao Zhang, Zhilin Zhang, Haolin Yuan, Nata Barbosa, **Sauvik Das** and Yang Wang. WebAlly: Making Visual Task-based CAPTCHAs Transferable for People with Visual Impairments. *In Proceedings of the Seventeenth Symposium on Usable Privacy and Security (SOUPS), 2021*. (Acceptance Rate: 26%)

Accessible at: https://sauvikdas.com/papers/30/serve

[DIS'21] † Youngwook Do, Linh Thai Hoang, Jung Wook Park, Gregory D. Abowd and **Sauvik Das**. Spidey Sense: Designing Wrist-Mounted Affective Haptics for Communicating Cybersecurity Warnings. *In Proceedings of the ACM Designing Interactive Systems Conference (DIS), 2021*. (Acceptance Rate: 27%)

Accessible at: https://sauvikdas.com/papers/29/serve

[CSCW'21a] Savanthi Murthy, Karthik Bhatt, **Sauvik Das** and Neha Kumar. Individually Vulnerable, Collectively Safe: The Security and Privacy Practices of Households with Older Adults. *In Proceedings of the ACM on Human-Computer Interaction, 5 (CSCW1).* Article 138. 2021.

Accessible at: https://sauvikdas.com/papers/28/serve

[CSCW'20] † P. Jacob Logas *, Rachel Zhong *, Stephanie Almeida and **Sauvik Das**. Tensions Between Access and Control in Makerspaces. *Proceedings of the ACM on Human-Computer Interaction*, *4*(CSCW3). Article 215. 2020.

* Authors contributed equally

Accessible at: https://sauvikdas.com/papers/26/serve

[SOUPS'20] † Valerie Fanelle *, Sepideh Karimi *, Aditi Shah *, Bharath Subramanian * and **Sauvik Das**. Blind and Human: Explore More Usable Audio CAPTCHA Designs. *To appear In Proceedings of the Sixteenth Symposium on Usable Privacy and Security (SOUPS), 2020.* (Acceptance Rate: 20%)

* Authors contributed equally

Accessible at: https://sauvikdas.com/papers/25/serve

DISTINGUISHED PAPER

[CHI'20] † Hue L.P. Watson, Eyitemi Moju-Igbene, Akanksha Kumari and **Sauvik Das**. "We Hold Each Other Accountable": Unpacking How Social Groups Approach Cybersecurity and Privacy Together. *In Proceedings of the 38th SIGCHI Conference on Human Factors in Computing Systems (CHI), 2020*. (Acceptance rate: 24%)

Accessible at: https://sauvikdas.com/papers/23/serve

BEST PAPER HONORABLE MENTION

[UIST'19] **Sauvik Das**, David Lu, Taehoon Lee, Joanne Lo and Jason Hong. The Memory Palace: Exploring Visual-Spatial Paths for Strong, Memorable, Infrequent Authentication. *In Proceedings of the 32nd ACM User Interface Software and Technology Symposium (UIST), 2019.* (Acceptance rate: 24%)

Accessible at: https://sauvikdas.com/papers/22/serve

[SOUPS'19] **Sauvik Das**, Laura Dabbish and Jason Hong. A Typology of Perceived Trigger for End-User Security and Privacy Behaviors. *In Proceedings of the Fifteenth Symposium on Usable Privacy and Security (SOUPS), 2019.* (Acceptance Rate: 23%)

Accessible at: https://sauvikdas.com/papers/21/serve

[CHI'18] **Sauvik Das**, Joanne Lo, Laura Dabbish and Jason Hong. Breaking! A Typology of Security and Privacy News and How It's Shared. *In Proceedings 36th SIGCHI Conference on Human Factors in Computing Systems (CHI), 2018*. (Acceptance Rate: 26%)

Accessible at: https://sauvikdas.com/papers/20/serve

Updated: 5/12/23

^ As faculty ^

[HCI Journal '17] Jason Wiese, **Sauvik Das**, John Zimmerman and Jason Hong. Evolving the Ecosystem of Personal Behavioral Data. *HCI Journal Special Issue on The Examined Life: Personal Uses for Personal Data (2017)*.

[CHI'17] **Sauvik Das**, Gierad Laput, Chris Harrison and Jason I. Hong. Thumprint: Socially-Inclusive Local Group Authentication Through Shared Secret Knocks. *In Proceedings of the 35th SIGCHI Conference on Human Factors in Computing Systems (CHI), 2017*. (Acceptance Rate: 25%)

Accessible at: https://sauvikdas.com/papers/18/serve

BEST PAPER HONORABLE MENTION

[MobileHCI '16] **Sauvik Das**, Jason Wiese and Jason I. Hong. Epistenet: Facilitating Programmatic Access & Processing of Semantically Related Personal Mobile Data. *In Proceedings of the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI), 2016.* (Acceptance Rate: 23%).

Accessible at: https://sauvikdas.com/papers/15/serve

[SOUPS'16] Alexander de Luca, **Sauvik Das**, Iulia Ion, Martin Ortlieb and Ben Laurie. Expert and Non-Expert Attitudes towards (Secure) Instant Messaging. *In Proceedings of the 10th International Symposium on Usable Privacy and Security (SOUPS), 2016.* (Acceptance Rate: 28%)

Accessible at: https://sauvikdas.com/papers/16/serve

[CHI'16] Haiyi Zhu, **Sauvik Das**, Yiqun Cao, Shuang Yu, Aniket Kittur and Robert Kraut. A Market in Your Social Network: The Effects of Extrinsic Rewards on Friendsourcing and Relationships. *In Proceedings of the 34th SIGCHI Conference on Human Factors in Computing Systems (CHI), 2016*. (Acceptance Rate: 23%)

Accessible at: https://sauvikdas.com/papers/14/serve

BEST PAPER HONORABLE MENTION

[USEC'16] **Sauvik Das**, Jason I. Hong and Stuart Schechter. Testing Computer-Aided Mnemonics and Feedback for Fast Memorization of High-Value Secrets. *In Proceedings of the NDSS Workshop on Usable Security (USEC)*, 2016.

Accessible at: https://sauvikdas.com/papers/12/serve

[CHI'15] **Sauvik Das**, Alexander Zook, and Mark Riedl. Examining Game World Topology Personalization. *In Proceedings of the 33rd SIGCHI Conference on Human Factors in Computing Systems (CHI), 2015*. (Acceptance Rate: 23%)

Accessible at: https://sauvikdas.com/papers/11/serve

[CSCW'15] **Sauvik Das**, Adam Kramer, Laura Dabbish and Jason I. Hong. The Role of Social Influence in Security Feature Adoption. *In Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work (CSCW), 2015.* (Acceptance Rate: 28.3%)

Accessible at: https://sauvikdas.com/papers/10/serve

[CCS'14] **Sauvik Das**, Adam Kramer, Laura Dabbish and Jason I. Hong. Increasing Security Sensitivity with Social Proof: A Large Scale Experimental Confirmation. *In Proceedings of the 21st Conference on Computer and Communications Security (CCS), 2014.* (Acceptance Rate: 19.5%).

Accessible at: https://sauvikdas.com/papers/9/serve

NSA BEST SCIENTIFIC CYBERSECURITY PAPER AWARD HONORABLE MENTION

[SOUPS'14] **Sauvik Das**, Tiffany Hyun-Jin Kim, Laura Dabbish and Jason I. Hong. The Effect of Social Influence on Security Sensitivity. *In Proceedings of the 8th International Symposium on Usable Privacy and Security (SOUPS), 2014.* (Acceptance Rate: 26.5%)

Accessible at: https://sauvikdas.com/papers/8/serve

[SOUPS'13] Eiji Hayashi, **Sauvik Das**, Shahriyar Amini, Jason Hong and Ian Oakley. CASA: Context-Aware Scalable Authentication. *In Proceedings of the 7th International Symposium on Usable Privacy and Security (SOUPS), 2013.* (Acceptance rate: 27%)

Accessible at: https://sauvikdas.com/papers/6/serve

[UbiComp'13] **Sauvik Das**, Eiji Hayashi, and Jason Hong. Exploring Capturable Everyday Memory for Autobiographical Authentication. *In Proceedings of the 2013 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp), 2013*. (Acceptance rate: 23%).

BEST PAPER

Accessible at: https://sauvikdas.com/papers/5/serve

[ICWSM'13] **Sauvik Das** and Adam Kramer. Self-Censorship on Facebook. *In Proceedings of the 7th International AAAI Conference on Weblogs and Social Media (ICWSM), 2013*. (Acceptance rate: 20%)

Accessible at: https://sauvikdas.com/papers/4/serve

[CSCW'13] Manya Sleeper, Rebecca Balebako, **Sauvik Das**, Amber McConohy, Jason Wiese, and Lorrie Cranor. The Post That Wasn't: Examining Self-Censorship on Facebook. *In Proceedings of the 16th annual ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW), 2013. (Acceptance Rate: 35.6%)*

Accessible at: https://sauvikdas.com/papers/3/serve

[HotMobile '12] Emmanuel Owusu, Jun Han, **Sauvik Das** and Adrian Perrig. ACCessory: Keystroke Inference using Accelerometers on Smartphones. *In Proceedings of the 12th annual ACM/SIG International Workshop on Mobile Computing Systems and Applications (HotMobile), 2012*. (Acceptance rate: 20.6%)

Accessible at: https://sauvikdas.com/papers/2/serve

^ As a Ph.D. student ^

[CIG'11] Ken Hartsook, Alexander Zook, **Sauvik Das**, and Mark Riedl. Toward supporting storytellers with procedurally generated game worlds. *In Proceedings of the 2011 IEEE Conference on Computational Intelligence in Games (CIG), 2011.*

MOST INNOVATIVE VIDEO NOMINATION

Accessible at: https://sauvikdas.com/papers/11/serve

^ As an undergraduate ^

Refereed Workshop Papers

[W6] **Sauvik Das**. Subversive AI: Resisting automated algorithmic surveillance with human-centered adversarial machine learning. *Resistance AI Workshop @ NeurIPS 2020*.

Accessible at: https://sauvikdas.com/papers/27/serve

[W5] **Sauvik Das**, Laura Dabbish and Jason Hong. Improving End-User Security Sensitivity by Making Security More Social. *CCC Sociotechnical Cybersecurity Workshop*. 2017

[W4] David Lu, Taehoon Lee, **Sauvik Das** and Jason Hong. Examining Visual-Spatial Paths for Mobile Authentication. *Who Are You?! SOUPS Workshop on Authentication in Usable Security (WAY)*. 2016

[W3] Jason Hong, **Sauvik Das**, Tiffany Hyun-Jin Kim, Laura A. Dabbish. Social Cybersecurity: Applying Social Psychology to Cybersecurity. *Human Computer Interaction Consortium (HCIC)*. 2015.

[W2] **Sauvik Das**, Thomas Zimmermann, Nachiappan Nagappan, Bruce Phillips, and Chuck Harrison. Revival Actions in a Shooter Game. *CHI Workshop on Designing and Evaluating Sociability in Online Video Games (DESVIG)*. 2013.

[W1] Eiji Hayashi, **Sauvik Das**, Shahriyar Amini, Emmanuel Owusu, Jun Han, Jason Hong, Ian Oakley, Adrian Perrig and Joy Zhang. CASA: context-aware scalable authentication. *SOUPS Workshop on Usable Privacy & Security for Mobile Devices*. 2012.

Patents

[PT3] Youngwook Do, Jung Wook Park, Gregory D Abowd and **Sauvik Das**. Intelligent Webcam Cover Apparatus and Method. Provisional patent application filed 63/114629.
https://licensing.research.gatech.edu/technology/smart-webcam-shield-protects-users-unknown-external-digital-intrusion

[PT2] **Sauvik Das** and Adam Kramer. Systems and Methods for Increasing Security Sensitivity Based on Social Influence. *US Patent No. US 10,007,791 B2. 2018*
https://patentimages.storage.googleapis.com/fb/d8/e4/e630d7af991597/US10007791.pdf

[PT1] **Sauvik Das** and Adam Kramer. Systems and Methods for Managing Shared Content. *US Patent No. 2017/0041408 A1*. 2017
https://patentimages.storage.googleapis.com/24/02/45/cfcf69e7f62966/US20170041408A1.pdf

Invited Papers (Lightly peer-reviewed)

[I2] **Sauvik Das**, W. Keith Edwards, DeBrae Kennedy-Mayo, Peter Swire and Yuxi Wu. Privacy for the People? Exploring Collective Action as a Mechanism to Shift Power to Consumers in End-User Privacy. *IEEE S&P Magazine*. Volume 19 (5). Invited submission.
Accessible at: https://sauvikdas.com/papers/32/serve

[I1] **Sauvik Das**. Social Cybersecurity: Understanding and Leveraging Social Influence to Increase Security Sensitivity. *German Journal of it – Information Technology Special Issue on Usable Security and Privacy, 2016*.

Theses and Technical Reports

[T2] **Sauvik Das**. Social Cybersecurity: Reshaping Security Through an Empirical Understanding of Human Social Behavior. *CMU-HCII-17-100*. Doctoral Dissertation.

[T1] **Sauvik Das**, LaToya Green, Beatrice Perez, Michael Murphy, and Adrian Perrig. Detecting User Activities Using the Accelerometer on Android Smartphones. 2010.

Demos & Videos

[DV1] Mark O. Riedl, Ken Hartsook, **Sauvik Das**, Alexander Zook, and Boyang Li. Game Forge: An Intelligent system that generates computer role playing games. *In Association for the Advancement of Artificial Intelligence, Video Competition, 2011*.

Invited Talks

[T34] Privacy by and through Design. *Anthropocene Institute*. *February 2023*.

[T33] Privacy for the People: Designing systems that shift power over personal data to end-users. *UMD—College Park CS*. *February 2022*

[T32] Privacy for the People: Designing systems that shift power over personal data to end-users. *CMU HCII*. *February 2022*

[T31] Privacy for the People: Designing systems that shift power over personal data to end-users. *JHU CS*. *February 2022*

[T30] Social Cybersecurity: Social Influence and Design in End-User Cybersecurity. *RSA Conference — Asia Pacific Japan. July 2020*

[T29] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *Distinguished Lecture, American University*. *November 2019*

[T28] *Invited Keynote Speaker for Gartner Security & Risk Summit, August 2019 (declined)*.

[T27] Reshaping End-User Cybersecurity: Finding the Next Dominant Design Pattern. *Google Fuschia Team, June 2019*

[T26] Reshaping End-User Cybersecurity: Finding the Next Dominant Design Pattern. *Symantec Research Labs, May 2019*

[T25] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *Johns Hopkins Applied Physics Lab Seminar Series, November 2018*

[T24] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *GVU Brown Bag Seminar Series, October 2018*

[T23] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. Georgia Tech IISP *Cybersecurity Lecture Series, August 2018*

[T22] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. GTRI *Seminar Series, April 2018*

[T21] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *USENIX Enigma, January 2018*

[T20] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *Stanford University, November 2017*

[T19] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *CCC Research Symposium – Early Career Researcher Poster, October 2017*

[T18] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *Georgia Institute of Technology IC, April 2017*

[T17] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *University of Washington CSE, April 2017*

[T16] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *University of California, Berkeley iSchool, April 2017*

[T15] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *Princeton University CS, March 2017*

[T14] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *University of Washington iSchool, February 2017*

[T13] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *University of Minnesota CS&E, February 2017*

[T12] Social Cybersecurity: Reshaping Security Through An Empirical Understanding of Human Social Behavior. *University of Michigan CSE, February 2017*

[T11] Thumprint: Socially-Inclusive Local Group Authentication through Shared Secret Knocks. *CMU CHIMPS Lab, September 2016*

[T10] Social Cybersecurity: Understanding and Leveraging Social Influence to Increase Security Sensitivity. *TU Darmstadt, May 2016*

[T9] Increasing Security Sensitivity with Social Proof: A Large-Scale Experimental Confirmation. *NSA Best Scientific Cybersecurity Paper Award Ceremony, November 2015*

[T8] Social Cybersecurity: Understanding and Leveraging Social Influence to Increase Security Sensitivity. *Georgia Tech Entertainment Intelligence Lab, October 2015*

[T7] Thumprint: Socially-Inclusive Local Group Authentication through Shared Secret Knocks. *Qualcomm Innovation Fellowship, Winners Day, September 2015*

[T6] The Role of Social Influence in Security Feature Adoption. *Google UX-Privacy Lunch, June 2015*

[T5] The Role of Social Influence in Security Feature Adoption. *CUPS Lunchtime Seminar, March 2015*

[T4] Increasing Security Sensitivity with Social Proof: A Large-Scale Experimental Confirmation. *CUPS Lunchtime Seminar, October 2014*

[T3] Everyday Objects for Physical Space Authentication. *Qualcomm Innovation Fellowship, Winners Day, September 2014*

[T2] Self-Censorship on Facebook. *Facebook Faculty Summit, July 2013*

[T1] Pro-Social Behavior in a Shooter Game. *Microsoft Research, December 2011*

Invited Panel Participation

[N1] **Public Interest Technologies for the ML Age**. 3rd Obfuscation Workshop, 2021. w/ Carmela Troncoso, Bettina Berendt, Kendra Albert and Nick Vincent. Moderated by Rebekah Overdorf and Bogdan Kulynych.

Transcript accessible at: https://api.obfuscation.karls.computer/uploads/pits_in_ml_transcript_19c0f0b317.txt

Selected Industry Research Experience

2021-2022 **Twitter**
Remote
Applied Sciences Consultant
Host: Dr. Solomon Messing
Working on the applied sciences team as a consultant to explore the link between population level privacy behaviors and online harassment.

2015 **Google**
Zurich, Switzerland
Privacy Research Intern
Mentor: Dr. Sebastian Schnorf
Worked on improving the value of privacy notifications using social and contextual cues.

2014 **Microsoft Research**
Seattle, WA, USA
Research Intern
Mentor: Dr. Stuart Schechter
Created a tool that lets lay people learn strong, randomly-assigned passwords with computer-assisted mnemonics.

2013 **Facebook**
Menlo Park, CA, USA
Data Science Intern
Mentor: Dr. Adam D.I. Kramer
Analyzed how security tools diffuse through social networks and ran an experiment using social cues to improve security tool adoption.

2012 **Facebook**
Menlo Park, CA, USA
Data Science Intern
Defined, implemented and conducted a large-scale analysis of “self-censorship” on Facebook.

Mentor: Dr. Adam D.I. Kramer

2011 **Microsoft Research**
Seattle, WA, USA
Research Intern
Mentor: Dr. Thomas Zimmermann

Ran a large-scale analysis associating pro-social behavior in a popular shooter game with retention and other metrics.

Selected Press & Media Appearences

- The Atlantic. *71% of Users Engage in Self-Censorship*, http://www.theatlantic.com/technology/archive/2013/04/71-of-facebook-users-engage-in-self-censorship/274982/
- Mashable. *71% of Users Engage in Self-Censorship*, http://mashable.com/2013/04/15/71-of-facebook-users-engage-in-self-censorship/
- Huffington Post. *Self-Censorship on Facebook Is Common, Study Finds*, http://www.huffingtonpost.com/craig-kanalley/self-censorship-facebook_b_3095101.html
- Digital Trends. How The Internet Has a Chilling Effect on Jokes. http://www.digitaltrends.com/opinion/context-internets-chilling-effect-jokes/#!HjbRo
- US News. Consumers seek online privacy.
- Pittsburgh City Paper. *Saving Face(book).* http://www.pghcitypaper.com/pittsburgh/saving-facebook/Content?oid=1718331
- Gamasutra. *A World Just For You.* http://www.gamasutra.com/blogs/MichaelCook/20130722/196678/
- The_Saturday_Paper__A_World_Just_For_You.php
- Serene RISC Quartlery Knowledge Digest, http://www.serene-risc.ca/files/prod/page_files/7/SERENE-RISC-Quarterly-Knowledge-Digest-Sample.pdf
- Financial Times. *Geeks like me put others of safe surfing.* http://www.ft.com/cms/s/0/b1b5e5d6-0dc9-11e5-aa7b-00144feabdc0.html#axzz3iy7j8sEy
- Vice. *People Can't Tell What Apps Use Encryption, And Don't Really Care, Study Finds*. http://motherboard.vice.com/read/people-cant-tell-what-apps-use-encryption-and-dont-really-care-study-finds
- SCS@CMU. *Skip the Password, Use "Secret Knocks" Instead*. http://www.cs.cmu.edu/news/skip-password-use-secret-knock-instead
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- The Atlantic. *People Are Changing the Way They Use Social Media*. https://www.theatlantic.com/technology/archive/2018/06/did-cambridge-analytica-actually-change-facebook-users-behavior/562154/
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- 90.5 WESA "The Confluence", Discussed the ban of TikTok on government devices. https://www.wesa.fm/show/the-confluence/2023-03-07/do-you-need-evidence-of-fraud-to-request-a-vote-recount-judges-offer-conflicting-answers

Academic Service

I have served on the program or organizing committees for the following conferences and journals:

2023 HotSoS (Program Committee)
USENIX SOUPS (Program Committee)
2022 PACM HCI CSCW (Associate Editor)
USENIX SOUPS (Program Committee)
2021 ACM IMWUT (Associate Editor)
ACM SIGCHI (Associate Chair—Understanding People Subcommittee)
USENIX SEC (Program Committee)
AAAI ICWSM Tutorials Chair
2020 ACM IMWUT (Associate Editor)
ACM SIGCHI (Associate Chair—Engineering Interactive Systems & Technology Subcommittee)
2019 ACM IMWUT (Associate Editor)
ACM SIGCHI (Associate Chair—Engineering Interactive Systems & Technology Subcommittee)

2018	ACM IMWUT [formerly UbiComp] (Associate Editor) ACM SIGCHI (Associate Chair—Privacy, Security and Visualization Subcommittee)
2017	WWW (Security & Privacy Track) AAAI ICWSM (Program Committee) USENIX SOUPS (Poster Jury)
2016	AAAI ICWSM (Program Committee)

I have also served as an external reviewer at least once for the following venues: Transactions on Social Computing, MobileHCI, ToCHI, ISWC, ACM CSCW, Social Science Review, ACM IUI, ACM UbiComp, ACM MobiSys, IEEE Pervasive Computing, ACM SIGCHI, ACM DIS, ACM CHI PLAY, USENIX SEC, USENIX SOUPS.

I have also received **8 special recognitions for outstanding reviews at**: CHI {2015, 2016, 2018,2021, 2022}, CSCW 2019, and IMWUT 2020.

Teaching Experience

As Primary or Co-Instructor:

Spring 2023	CMU	05-200/674 Ethics and Policy Issues in Computing (w/ Michael Skirpan)
Fall 2022	CMU	05-120 Intro to HCI
Spring 2022	Georgia Tech	CS 4/8803: Usable Privacy & Security
		On leave Spring & Fall 2021
Fall 2020	Georgia Tech	CS 4873: Computers, Society & Professionalism
Spring 2020	Georgia Tech	CS 4001: Computers, Society & Professionalism
Fall 2019	Georgia Tech	*Teaching release*
Spring 2019	Georgia Tech	CS 4/8803: Usable Privacy & Security
Fall 2018	Georgia Tech	*Teaching release*
Spring 2018	Georgia Tech	CS 4001: Computers, Society & Professionalism

As Teaching Assistant:

Fall 2013	CMU	05-4/633 Software Structures for User Interfaces — Mobile Lab (Head TA)
Fall 2012	CMU	05-4/633 Software Structures for User Interfaces — Mobile Lab (Head TA)
Spring 2008	Georgia Tech	CS 2340: Objects and Design (TA)
Fall 2007	Georgia Tech	CS 1332: Data Structures & Algorithms (TA)

Guest Lectures:

- Georgia Tech | Mobile & Ubiquitous Computing | Spring 2020
- Occidental College | *Fundamentals of Computer Science* | Spring 2020
- Georgia Tech | Mobile & Ubiquitous Computing | Fall 2019

- Georgia Tech | Mobile & Ubiquitous Computing | Spring 2019
- Carnegie Mellon University | *Social Web: Content, Communities and Context* | Fall 2015

Extended Honors and Awards

GVU People's Choice Award—First Place (2019)

CCC Leadership in Science Policy (LiSPI) Institute Fellow (2019)

Gartner Security & Risk Summit, Invited Keynote (2019—declined)

Contributing Writer to PBS Crash Course in Computer Science, Cybersecurity Episode (viewed over 700,000 times)

Student Mentorship

Ph.D. Students (as primary or co-advisor)

Ezra Awumey	Fall 2022 — Present (w/ Jodi Forlizzi)	
Hao-Ping (Hank) Lee	Fall 2021 — Present (w/ Jodi Forlizzi)	[Oakland'23]
P. Jacob Logas	Fall 2019 – Present (w/ Rosa Arriaga)	[CSCW'20],[CSCW'22]
Yuxi Wu	Fall 2019 – Present (w/ W. Keith Edwards)	[CSCW'21b],[Oakland'22],[IMWUT'22],[CHI'22b], [FAccT'23]
Youngwook Do	Fall 2018 – Present (w/ Gregory Abowd)	[DIS'21],[UIST'21],[IMWUT'22],[SEC'23]

Project advisor (Ph.D. students)

Kimi Wenzel *CMU*	Social cybersecurity (w/ Laura Dabbish & Jason Hong)	[CHI'22a]
Isadora Krsek *CMU*	Social cybersecurity, Privacy Grammarly (w/ Laura Dabbish & Jason Hong)	[CHI'22a]
Zhixuan Zhou *UIUC*	Usable / accessible mobile wallets (w/ Yang Wang)	
Tanushree Sharma *UIUC*	Usable / accessible mobile wallets (w/ Yang Wang)	
Smirity Kaushik *UIUC*	Guard Lens (w/ Yang Wang)	[SOUPS'23b]
Zhuohao Zhang *UIUC*	Web Ally & Image Ally (w/ Yang Wang)	[SOUPS'21],[SOUPS'23a]
Sindhu Ernala *Georgia Tech*	Dynamic audience selection	[CSCW'21b]
Nivedita Arora *Georgia Tech*	Powering for Privacy (w/ Gregory Abowd)	[SEC'23]

Dissertation committees (Ph.D.)

Alan Dingtian Zhang *Georgia Tech*	2020-2021	Towards Ubiquitous Self-Powered Ambient Light Sensing Surfaces
Cori Faklaris *Carnegie Mellon University*	2021-2022	*Towards a Socio-Cognitive Stage Model of Cybersecurity Behavior Adoption*

Nivedita Arora *Georgia Tech*	2021-2022	*Self-sustaining Wireless Interactive Surfaces*
Vedant Das Swain *Georgia Tech*	2022-2023	*Passive Sensing Frameworks for the Future of Information Workers*
Upol Ehsan *Georgia Tech*	2023-	*Title TBD*

Oral quals committees (Ph.D.)

Sindhu Ernala	Fall 2018
Clayton Feustel	Fall 2018
Sucheta Ghoshal	Fall 2018
Jung Wook Park	Fall 2019 – Fall 2020
Upol Ehsan	Fall 2020

Master's Students

Anubha Kabra	Spring 2023	
Qi Sun	Spring 2023	
Mengzhe Ye	Spring 2023	
Raksarat Vorascuha	Fall 2022	
Shivani Butala	Fall 2022	
Lan Gao (now Ph.D. student at UChicago)	Fall 2021	
Savanthi Murthy	Spring 2020	[CSCW'21a]
Hanan Abdi	Spring 2020	[SEC'22]
Avinandan Basu	Spring 2020	[IMWUT'22]
Bu Li	Spring 2020	
Zhouyu Li (now Ph.D. student at UNCC)	Spring 2020	[CSCW'22],[UIST'21], [Oakland'23]
Sepideh Karimi	Spring 2019	[SOUPS'20]
Aditi Shah	Spring 2019	[SOUPS'20]
Bharath Subramanian	Spring 2019	[SOUPS'20]
Eyetemi Moju-Igbene	Fall 2018	[CHI'20],[SEC'22]
Linh Hoang	Fall 2018	[UIST'21]
Cooper Colglazier	Fall 2018	
Shweta Singhal	Fall 2018	
Timothy Deeb-Swihart	Fall 2018	
Priyanshu Jaiwar	Fall 2018	
Tina Johnson	Fall 2018	
Akanksha Kumari	Fall 2018	[CHI'20]
Jason Paul	Summer 2018	
Hue Watson	Summer 2018	[CHI'20]

Undergraduates

Yousif Alnajjar	Spring 2023	
Deepti Sunkara	Spring 2023	
Nancy Zuo	Fall 2022	
Ayush Shekhar	Fall 2022	
Sydney Bice	Spring 2022	[FAccT'23]
Alan Lu	Spring 2020	[SEC'22]
Eunseo Cho	Spring 2020	
Stephanie Yang	Spring 2020	[CSCW'22b], [Oakland'23]
Devansh Ponda	Spring 2020	
Shweta Singhal	Spring 2020	
Tanay Gummadi	Spring 2020	
Stephanie Almeida	Spring 2019	[CSCW'20]
Valerie Fanelle	Spring 2019	[SOUPS'20]
Siddhant Singh	Spring 2019	[UIST'19]
Rachel Zhong	Fall 2018	[CSCW'20]
(now Ph.D. student at UW HCDE)		
Nancy Wang	Fall 2018	
Nancy Tao	Fall 2018	
Ziang Ren	Fall 2018	
Ryan Qin	Fall 2018	
Tong Peng	Fall 2018	
Nikole McLeish	Fall 2018	
Jenny Li	Fall 2018	
Akum Kang	Fall 2018	
Kris Satya	Fall 2018	
Vamsi Desu	Fall 2018	
Ilya Golod	Fall 2018	
Davit Gabrielyan	Fall 2018	

As a Ph.D. Student at Carnegie Mellon University

Tuan Ahn Le	Fall 2016 – Fall 2017. CMU EE	
Joanne Lo	Fall 2015 – Fall 2017. CMU SDS	[CHI'18],[UIST'19]
Haley Bryant	Spring 2015. CMU SDS	
Taehoon Lee	Fall 2014 – Spring 2016. CMU CS.	[W3], [UIST'19]
David Lu	Fall 2014 – Fall 2017. CMU CS	[W3], [UIST'19]
Yiqun Cao	Spring 2014 – Fall 2015. CMU BA	[CHI'16]
Shuang Yu	Spring 2014 – Fall 2015. CMU IS	[CHI'16]
Solon Mao	Fall 2014. CMU IS.	
Ethan Chan	Spring 2014. CMU IS.	
Barath Chandrashekhar	Spring 2014. CMU MHCI	