

Alejandro Cuevas

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Current position

Ph.D. Candidate, Societal Computing
Software and Societal Systems, Carnegie Mellon University

Interests

Areas Computer security; Measurements; Economics; Computational Social Science
Sub-areas Underground Communities; Cryptocurrencies; Social Media; LLMs

Education

2018 BS with honors in Security and Risk Analysis, Schreyer Honors College
The Pennsylvania State University

2025 PhD in Societal Computing, School of Computer Science
Carnegie Mellon University

Publications

- 2025 **Cuevas, A.**, Scurrell, J. V., Brown, E. M., Entenmann, J., and Daepf, M. I. G. (2025), “Collecting Qualitative Data at Scale with Large Language Models: A Case Study”, *Proceedings of the ACM in Human-computer Interaction (CSCW)* (To Appear).
- 2024 **Cuevas, A.** and Christin, N. (2024), “Does Online Anonymous Market Vendor Reputation Matter?”, *USENIX Security Symposium 2024 (USENIX Sec.)*
- Tsuchiya, T., **Cuevas, A.**, and Christin, N. (2024), “Identifying Risky Vendors in Cryptocurrency P2P Marketplaces”, *The ACM Web Conference (WWW)*.
- 2023 Martorana, A., Chang, E., Hibshi, H., and **Cuevas, A.** (2023), “Investigating the Experiences of Female CTF Players”, *Workshop on Security Information Workers (WSIW)*
- Kawai, D., **Cuevas, A.**, Routledge, B., Zetlin-Jones, A., and Christin, N. (2023), “Is Your Digital Neighbor a Reliable Investment Advisor?”, *The ACM Web Conference (WWW)*
- Tsuchiya, T., **Cuevas, A.**, Magelinski, T., and Christin, N. (2023), “Misbehavior and Account Suspension in an Online Financial Communication Platform”, *The ACM Web Conference (WWW)*
- 2022 **Cuevas, A.**, Hogan, E., Hibshi, H., and Christin, N. (2022), “Observations From an Online Security Competition and Its Implications on Crowdsourced Security”, *CMU-CyLab-22-001*, CMU CyLab.
- Cuevas, A.**, Miedema, F., Soska, K., Christin, N., and van Wegberg, R. (2022), “Measurement by Proxy: On the Accuracy of Online Marketplace Measurements”, *USENIX Security Symposium (USENIX)*
- 2021 Vermeer, M., West, J., **Cuevas, A.**, Niu, S., Christin, N., Van Eeten, M., Fiebig, T., Gañán, C., and Moore, T. (2021), “A Framework for Asset Discovery: Synthesizing Advances in Network Measurements for Protecting Organizations”, *IEEE European Symposium on Security & Privacy (EURO S&P)*
- 2019 Mu, D., Guo, W., **Cuevas, A.**, Chen, Y., Gai, J., Xing, X., Mao, B., and Song, C. (2019), “RENN: Efficient Reverse Execution with Neural-Network-assisted Alias Analysis”, *IEEE/ACM International Conference on Automated Software Engineering (ASE)*
- 2018 Mu, D., **Cuevas, A.**, Yang, L., Hu, H., Xing, X., Mao, B., and Wang, G. (2018), “Understanding the Reproducibility of Crowd-reported Security Vulnerabilities”, *USENIX Security Symposium (USENIX Sec.)*
- Le Blond, S., **Cuevas, A.**, Troncoso-Pastoriza, J., Jovanovic, P., Ford, B., and Hubaux, J. (2018), “On Enforcing the Digital Immunity of a Large Humanitarian Organization”, *IEEE Symposium on Security & Privacy (S&P)*, **Distinguished Paper Award**.

Research Positions

2024 - 2025	Microsoft Research Report to: Dr. Madeleine I. G. Daepf	Research Consultant
2023	Microsoft Research Advised by: Dr. Glen Weyl and Dr. Madeleine I. G. Daepf	Research Intern
2022	TU Delft Hosted by: Prof. Rolf van Wegberg	Visiting Researcher
2018	Stevens Institute of Technology Hosted by: Prof. Jun Xu	Visiting Scholar
2016-2018	The Pennsylvania State University Advised by: Profs. Peng Liu, Dingao Wu, and Xinyu Xing	Research Assistant
2017	EPFL - École Polytechnique Fédérale de Lausanne Advised by: Profs. Jean-Pierre Hubaux and Bryan Ford	Research Assistant
2016	The Pennsylvania State University Advised by: Profs. John Carroll and Ben Hanrahan	Research Assistant

Industry Experience

2019-2025	Redoux (redoux.nyc) Report to: <i>Self</i>	Co-Founder
2019	Neutrality Sàrl (neutrality.ch) Report to: Dr. Stevens Le Blond	Consultant
2018	EPFL - École Polytechnique Fédérale de Lausanne Report to: Prof. Jean-Pierre Hubaux	Software Engineer
2016	Microsoft Report to: Kunal Gandhi	Software Engineer
2015	PwC: PricewaterhouseCoopers Report to: Tom Kovell	Consulting Intern

Teaching

2023	Carnegie Mellon University Course: 07-300: “Research and Innovation in Computer Science”	Teaching Assistant
2022	Carnegie Mellon University Course: 17-303 “Cryptocurrencies, Blockchains, and Applications”	Teaching Assistant
2017	The Pennsylvania State University Course: DS-300 “Privacy and Security in the Data Sciences”	Teaching Assistant

Grants, Honors & Awards

2022-23	Fellowship - CMU CyLab Presidential Fellowship
2018	Distinguished Paper Award - IEEE Symposium on Security and Privacy
2018	Finalist - GeekPwn Cybersecurity and AI Contest @ DEFCON
2018	Student Scholarship - Black Hat USA
2017	Research Grant - (SHC) The Pennsylvania State University

2017	Research Grant - (SEN) The Pennsylvania State University
2017	Research Grant - (IST) The Pennsylvania State University
2016	Information Security Scholarship - (ISC) ²
2016-2018	Undergraduate Excellence Scholarship - (IST) The Pennsylvania State University
2015-2018	Dean's List (4.0/4.0) - The Pennsylvania State University
2015-2018	Academic Grant - (PLA) The Pennsylvania State University
2014-2018	Academic Excellence Grant - (SHC) The Pennsylvania State University

Invited Talks and Presentations

2024	“Are Reputation Systems Harmful?” IEEE Communications Society University of California San Diego	Pittsburgh, PA San Diego, CA
2024	“How Reputation Systems Fail in Practice” University of Washington Security Seminar University of Illinois Urbana-Champaign Security Seminar The Pennsylvania State University Security Seminar Purdue CERIAS Seminar	Seattle, WA Champaign, IL State College, PA Online
2024	“Does Online Anonymous Reputation Matter?” USENIX Security Symposium	Philadelphia, PA
2023	“Risks in Cryptocurrency Markets” Paraguayan Central Bank	Asunción, PY
2023	“Does Online Anonymous Reputation Matter?” Cylab Partners Conference	Pittsburgh, PA
2023	“Applications of Large Language Models in Enterprises” Universidad Americana	Asunción, PY
2022	“Measurement by Proxy: On the Accuracy of Online Marketplace Measurements” USENIX Security Symposium	Boston, MA
2022	“Introduction to Darkweb Marketplaces” Universidad Comunera	Online
2021	“Obs. From an Online Sec. Competition and its Implications on Crowdsourced Sec.” Workshop on Information Security Workers	Online
2019	“Overview of Cybersecurity in Paraguay: Challenges and Opportunities for the NP” Paraguayan National Police (Department of Financial Crimes)	Asunción, PY

Service

2025	PC Member - Free and Open Communications on the Internet (FOCI)
2025	PC Member - Conference on Computer and Communications Security (AsiaCCS)
2024	PC Member - Conference on Computer and Communications Security (AsiaCCS)
2024	Reviewer - Recent Advances in Intrusion Detection (RAID)
2021-2024	Admissions Committee & Mentor - CMU REUSE
2023	Faculty Search Committee - CMU Software and Societal Systems Department (S3D)
2022	Reviewer - Conference for Decision and Game Theory for Security (GameSec)
2022	Admissions Committee - CMU Societal Computing PhD Program

Miscellaneous

Spoken Languages: Spanish, English, French, Portuguese, Guarani

Vulnerability Reproduction Artifacts: <https://github.com/mudongliang/LinuxFlaw>

RENN Artifacts: <https://github.com/mudongliang/RENN>

Measurement by Proxy Artifacts: <https://github.com/aledcuevas/dnm-simulation>

Dynamic Prober LLM Chatbot: <https://github.com/microsoft/dynamic-prober>