

# Alexander Gamero-Garrido

Last updated: December, 2024

Email: [agamerog@ucdavis.edu](mailto:agamerog@ucdavis.edu)

Web: [gamero-garrido.com](http://gamero-garrido.com)

Research Interests: Computer Networks, Policy, Privacy,  
Internet Measurement

University of California Davis  
Computer Science  
Davis, CA 95616

## Education

---

- 2021      **Ph.D. in Computer Science**  
University of California San Diego  
*Transit Influence of Autonomous Systems: Country-Specific Exposure of Internet Traffic*,  
Alex C. Snoeren and Alberto Dainotti (CAIDA), advisors
- 2015      **M.Sc. in Technology and Policy**  
Massachusetts Institute of Technology  
Thesis at the Computer Science and Artificial Intelligence Laboratory
- 2011      **B.Eng. in Electronics Engineering**, awarded *cum laude & exceptional thesis*  
University Simón Bolívar, Venezuela  
Exchange studies & thesis at Lund University, Sweden

## Professional Experience

---

- 2023 – Pres.    **Assistant Professor of Computer Science**  
University of California Davis
- 2021 – 2023    **Ford Foundation & Future Faculty Fellow**  
Northeastern University, David Choffnes, mentor
- 2018 – 2019    **Research Intern, Security Software Engineering**  
Akamai Technologies  
Cambridge, Massachusetts, and San Francisco, California
- 2014          **Cybersecurity Intern**  
United Nations, International Telecommunication Union  
Geneva, Switzerland

## Awards & Honors

---

- 2024          **Caspar Bowden Award for Outstanding Research in Privacy Enhancing Technologies, Runner-Up**  
Privacy Enhancing Technologies Symposium  
Awarded for “Tracking, Profiling, and Ad Targeting in the Alexa Echo Smart Speaker Ecosystem”
- 2023          **CAMPOS Faculty Scholar**  
California State Assembly & University of California, Davis

**IMC Best Paper Award**

ACM SIGCOMM Internet Measurement Conference

Awarded for “Tracking, Profiling, and Ad Targeting in the Alexa Echo Smart Speaker Ecosystem”

2022

**Ford Foundation Postdoctoral Fellowship**

National Academies of Sciences, Engineering and Medicine

**PAM Best Dataset Paper Award**

Passive and Active Measurement Conference

Awarded for “Quantifying Nations’ Exposure to Traffic Observation and Selective Tampering”

2021

**Future Faculty Fellowship**

Northeastern University

2019

**Microsoft Research Dissertation Grant**

Microsoft Research

2018

**SIGCOMM Best Paper Award**

ACM Special Interest Group on Data Communications

Awarded for “Inferring Persistent Interdomain Congestion”

## Publications

---

*\*Directly supervised student*

### Refereed Papers

2023

**Network Topology Facilitates Internet Traffic Control in Autocracies**Eda Keremoğlu, Nils B. Weidmann, [Alexander Gamero-Garrido](#), Esteban Carisimo, Alberto Dainotti, and Alex C. Snoeren*Proceedings of the National Academy of Sciences Nexus (PNAS Nexus)***Tracking, Profiling, and Ad Targeting in the Alexa Echo Smart Speaker Ecosystem**Umar Iqbal, Pouneh Nikkhah Bahrami, Rahmadi Trimananda, Hao Cui, [Alexander Gamero-Garrido](#), Daniel J. Dubois, David Choffnes, Athina Markopoulou, Franziska Roesner, Zubair Shafiq*ACM SIGCOMM Internet Measurement Conference (IMC)*| **Best Paper Award** |

2022

**Quantifying Nations’ Exposure to Traffic Observation and Selective Tampering**[Alexander Gamero-Garrido](#), Esteban Carisimo, Shuai Hao, Bradley Huffaker, Alex C. Snoeren, Alberto Dainotti*Passive and Active Measurement Conference (PAM)*| **Best Dataset Paper Award** |

2021

**Identifying ASes of State-Owned Internet Operators**Esteban Carisimo, [Alexander Gamero-Garrido](#), Alex C. Snoeren, Alberto Dainotti*ACM SIGCOMM Internet Measurement Conference (IMC)*

2018

**Inferring Persistent Interdomain Congestion**

Amogh Dhamdhere, David D. Clark, [Alexander Gamero-Garrido](#), Matthew Luckie, Ricky K. P. Mok, Gautam Akiwate, Kabir Gogia\*, Vaibhav Bajpai, Alex C. Snoeren, kc claffy

*ACM Special Interest Group on Data Communications (SIGCOMM)*

| **Best Paper Award** |

2017

**Quantifying the Pressure of Legal Risks on Third-party Vulnerability Research**

[Alexander Gamero-Garrido](#), Stefan Savage, Kirill Levchenko, and Alex C. Snoeren

*ACM SIGSAC Conference on Computer and Communications Security (CCS)*

2015

**Characterizing Performance of Residential Internet Connections Using an Analysis of Measuring Broadband America's Web Browsing Test Data**

[Alexander Gamero-Garrido](#)

*Telecommunications Policy Research Conference (TPRC)*

## Pre-Prints

In Revision

**Empirically Measuring Data Localization in the EU**

[Alexander Gamero-Garrido](#), Kicho Yu\*, Sumukh Vasisht Shankar\*, Sachinkumar Singh\*, Sindhya Balasubramanian\*, Alexander Wilcox\*, and David Choffnes

*Privacy Enhancing Technologies Symposium (PETS)*

Submitted

**The World Beyond Europe: Crowdsourced Insights into Tracker Data Flow Practices in 23 Countries**

Sachinkumar Singh\*, Rob Ricci, [Alexander Gamero-Garrido](#)

*IEEE Symposium on Security and Privacy 2025*

Submitted

**Quantifying IXP Indispensability**

Nishant Acharya\*, Vijeth Kumbarahally, [Alexander Gamero-Garrido](#)

*ACM SIGCOMM Internet Measurement Conference (IMC)*

## Posters

2022

**Using Reverse IP Geolocation to Identify Institutional Networks**

[Alexander Gamero-Garrido](#), Elizabeth Belding, David Choffnes

*ACM Internet Measurement Conference*

2022

**Assessing the GDPR's Effectiveness in Preventing Privacy Infringements from Cross-Border Data Transfers**

[Alexander Gamero-Garrido](#), Kicho Yu, Sumukh Vasisht Shankar, Sindhya Balasubramanian, Alexander Wilcox, and David Choffnes

*ProperData Symposium, UC Irvine*

2016

**Supporting Peer Instruction with Evidence-Based Online Instructional Templates**

Tricia J. Ngoon, [Alexander Gamero-Garrido](#), Scott Klemmer

*ACM Conference on Learning at Scale*

## Grants

---

- 2024 – 2027 **Measurement, Modeling and Analysis to Assess Network Connectivity and Performance at Anchor Institutions**  
David Choffnes (PI), [Alexander Gamero-Garrido](#) (PI), Elizabeth Belding (PI)  
National Science Foundation, Networking Technology and Systems (NeTS), \$1,080,000
- 2023 **Internet Measurements to Empirically Characterize U.S. Broadband**  
David Choffnes (Co-PI), [Alexander Gamero-Garrido](#) (Co-PI)  
Comcast Innovation Fund, \$85,000

## Invited Talks

---

- 2023 **Interactions Between the Internet & Public Policy: Impacts on Security, Privacy & Resilience**  
University of California Davis  
Brown University  
University of Utah  
Columbia University  
Georgia Institute of Technology
- 2023 **The Internet in the Global South: Security, Resilience & Policy**  
Cybersecurity Summer Institute, Georgia Institute of Technology
- 2023 **Effectiveness of the GDPR in Preventing Privacy Infringements from Cross-Border Data Transfers**  
Tufts University
- 2022 **Assessing the State of the Digital Divide with Internet Measurements**  
National Academies of Sciences, Engineering and Medicine
- 2022 **Identifying ASes of State-Owned Internet Operators**  
Georgia Institute of Technology
- 2020 – 2022 **Country-Level Transit Influence of Autonomous Systems**  
University of California Santa Barbara  
University of Southern California  
New York University  
Columbia University  
Microsoft Research  
Georgia Institute of Technology  
Northeastern University
- 2020 **Autonomous Systems as Topological Ports of Entry in Latin America (Spanish)**  
Latin American and Caribbean Network Operators' Group (LACNOG)

## Selected Media Coverage

---

- 2023      **Quantifying Nations' Exposure to Traffic Observation and Selective Tampering**  
*Financial Times, EurekAlert! (AAAS), UC San Diego News, TrustMyScience (France), peoples dispatch (India)*
- 2022      **Your Echoes are Heard: Tracking, Profiling, and Ad Targeting in the Amazon Smart Speaker Ecosystem**  
*Chicago Tribune, The Verge, The Register (UK), la Repubblica (Italy), Axios Seattle, msn.com*
- 2018      **Inferring Persistent Interdomain Congestion**  
*The Register (UK)*

## Teaching

---

- 2023 – Pres.    **Instructor of Record**  
Undergraduate: Computer Networks  
Graduate: Computer Networks, Internet Measurement & Policy  
University of California, Davis
- 2019 – 2021    **Instructional Assistant**  
Undergraduate: Computer Networks (two terms), Networked Systems  
Graduate: Computer Networks, Interaction Design Research  
University of California, San Diego
- 2007          **Teaching Assistant**  
Undergraduate: Electric Circuits (two terms)  
University Simón Bolívar, Venezuela

## Service

---

### Proposal Review

- 2023          NSF Proposal Review Panel

### Program Committees

- 2022 – 2025    ACM Internet Measurement Conference (IMC)
- 2024 – 2025    Privacy Enhancing Technologies Symposium (PETS)
- 2022, 2024    Passive and Active Measurement Conference (PAM)
- 2024          Applied Networking Research Workshop (ANWR)
- 2024          Network Traffic Measurement and Analysis Conference (TMA)

## External Reviewer

- 2019, 2022 ACM SIGCOMM Computer Communication Review (CCR)  
 2019 Performance Evaluation (PEVA)

## Student Research Advising

*\*Serve as Main Ph.D. Advisor*

### **University of California, Davis Ph.D.**

- 2024 – Pres. Nishant Acharya\*  
 Shivani Kalamadi\*  
 Humaira Fasih Ahmed Hashmi\*  
 Muhammad Jazlan

### **University of Utah Ph.D.**

- 2022 – Pres. Sachinkumar Singh

### **Northeastern University Ph.D.**

- 2023 – Pres. Ashutosh Kshirsagar

### **Northeastern University M.Sc.**

- 2022 – 2023 Kicho Yu → University of Southern California Ph.D.  
 Sumukh Vasisht Shankar → Walmart (Intern) → Yale University (Research Data Scientist)  
 Sindhya Balasubramanian → Tesla (Intern) → Tesla (Data Analyst)  
 Alexander Wilcox

### **Northeastern University B.Sc.**

- 2021 – 2022 Britney (Ise) Okhiria

### **University of California, San Diego B.Sc.**

- 2018 – 2019 Nikhil Pothuru → Georgia Institute of Technology M.Sc.

- 2017 – 2018 Kabir Gogia → Facebook

- 2016 Kean Freeman

## Leadership

- 2023 **Invited Participant at NSF Workshop** on Bridging the Divide, University of California Berkeley  
 2023 **Panelist at Reach(OUT) LGBTQA+ Career Conference**, Northeastern University  
 2022 – 2023 **Cultural and Spritual Life Staff Affiliate**, LGBTQA Resource Center, Northeastern University  
 2022 **Pride in STEM Interview**, IEEE Computer Society  
 2021 **Internet Measurement Conference “Pod” Organizer, Boston**, Northeastern University  
 2017 – 2018 **Publicity Manager**, Graduate Women in Computing, University of California, San Diego  
 2017 **UC San Diego M.Sc. & Ph.D. Recruiter**, Grace Hopper Celebration of Women in Computing

2014 – 2015 **Co-President**, Technology Policy Student Society, Massachusetts Institute of Technology

2011 **Young Iberoamerican Leader**, Carolina Foundation, Spain

2011 **Student Commencement Speaker**, University Simón Bolívar, Venezuela

## Languages

---

**English**, Bilingual Proficiency

**Spanish**, Bilingual Proficiency

**Italian**, Advanced Proficiency