

# Esteban Carisimo

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## Education

### Universidad de Buenos Aires

[Buenos Aires, Argentina](#)

Doctor of Engineering

*Apr 2015 - Apr 2020*

- Advisor: J.I. Alvarez-Hamelin (UBA); Co-Advisor: Amogh Dhamdhere (UC San Diego)
- Dissertation: *Internet tomography: Traffic measurement and its relationship with topology*
- Summa Cumme Laude

### Universidad de Buenos Aires

[Buenos Aires, Argentina](#)

Engineering Degree in Electronics

*Mar 2009 - Dec 2014*

- GPA: 3.60 (8.15/10)
- Diploma de Honor (*Honor for outstanding GPA*)
- Dissertation: *Network tomography: Measurements on an Internet Exchange Point*

## Appointments

### Department of Computer Science, Northwestern University

[Evanston, IL, USA](#)

Postdoctoral Fellow

*Apr 2021 - Present*

- Mentor: Fabian E. Bustamante

### Department of Computer Science, School of Engineering, Universidad de Buenos Aires

[Buenos Aires, Argentina](#)

Adjunct Professor

*Aug 2019 - Apr 2021*

- Tenured Teaching Appointment
- Instructor of 75.43 - Introduction to Distributed Systems

### Department of Computer Science, School of Engineering, Universidad de Buenos Aires

[Buenos Aires, Argentina](#)

Head of Teaching Assistants

*Mar 2017 - Jul 2019*

- 75.43 - Introduction to Distributed Systems

### CONICET

[Buenos Aires, Argentina](#)

Doctoral Fellow

*Apr 2015 - Apr 2020*

- Mentor: J.I. Alvarez-Hamelin

### CAIDA, San Diego Supercomputer Center, UC San Diego

[La Jolla, CA, USA](#)

Visiting Graduate Student

*Oct 2017 - Apr 2018*

- Researched automatic detection of persistent congestion in the Internet.
- Mentor: Amogh Dhamdhere

## Awards

2022 **Best Dataset Award**, *Quantifying Nations' Exposure to Traffic Observation and Selective Tampering*. Passive and Active Measurement (PAM) Conference

[Virtual Event](#)

## Publications

### JOURNAL ARTICLES

- [J3] Network topology facilitates internet traffic control in autocracies.  
Eda Keremoğlu, Nils B Weidmann, Alexander Gamero-Garrido, **Esteban Carisimo**, Alberto Dainotti, Alex C Snoeren  
*PNAS Nexus*, pgae069, 2024
- [J2] A First Look at the Latin American IXPs.  
**Esteban Carisimo**, Julián M. Del Fiore, Diego Dujovne, Cristel Pelsser, J. Ignacio Alvarez-Hamelin  
*SIGCOMM Comput. Commun. Rev.*, pp. 18–24, 2020
- [J1] Studying the evolution of content providers in IPv4 and IPv6 internet cores.  
**Esteban Carisimo**, Carlos Selmo, J. Ignacio Alvarez-Hamelin, Amogh Dhamdhere  
*Computer Communications*, pp. 54–65, 2019

### CONFERENCE PROCEEDINGS

- [C9] Ten years of the Venezuelan crisis - An Internet perspective  
**Esteban Carisimo**, Rashna Kumar, Caleb J. Wang, Santiago Klein, Fabián E. Bustamante  
*ACM SIGCOMM*, 2024

- [C8] A hop away from everywhere: A view of the intercontinental long-haul infrastructure.  
**Esteban Carisimo**, Caleb J. Wang, Mia Weaver, Paul Barford, Fabián E. Bustamante  
*Proc. ACM Meas. Anal. Comput. Syst.* 2024
- [C7] as2org+: Enriching AS-to-Organization Mappings with PeeringDB.  
Augusto Arturi, **Esteban Carisimo**, Fabián E. Bustamante  
*Passive and Active Measurement*, 2023, Cham
- [C6] Destination Unreachable: Characterizing Internet Outages and Shutdowns.  
Zachary Bischof, Kennedy Pitcher, **Esteban Carisimo**, Amanda Meng, Rafaek Nunes, Ramakrishna Padmanabhan, Margaret E. Roberts, Alex C. Snoeren, Alberto Dainotti  
*ACM SIGCOMM*, 2023
- [C5] Jitterbug: A new framework for jitter-based congestion inference.  
**Esteban Carisimo**, Ricky K. P. Mok, David D. Clark, Kc Claffy  
*Passive and Active Measurement*, 2022, Cham
- [C4] 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*, 2022, Cham
- [C3] Identifying ASes of State-Owned Internet Operators.  
**Esteban Carisimo**, Alexander Gamero-Garrido, Alex C. Snoeren, Alberto Dainotti  
*ACM Internet Measurement Conference (IMC)*, 2021, New York, NY, USA
- [C2] Studying the Evolution of Content Providers in the Internet Core.  
**Esteban Carisimo**, Carlos Selmo, J. Ignacio Alvarez-Hamelin, Amogh Dhamdhere  
*Network Traffic Measurement and Analysis Conference (TMA)*, 2018
- [C1] Hidden Internet Topologies Info: Truth or Myth?  
Sofía Silva Berenguer, **Esteban Carisimo**, J. Ignacio Alvarez-Hamelin, Francisco Valera Pintor  
*Workshop on Fostering Latin-American Research in Data Communication Networks*, 2016, New York, NY, USA

## EXTENDED ABSTRACTS AND POSTERS (WITH PROCEEDINGS)

- [P3] A hop away from everywhere: A view of the intercontinental long-haul infrastructure  
**Esteban Carisimo**, Caleb J. Wang, Mia Weaver, Paul Barford, Fabián E. Bustamante  
*Abstracts of ACM SIGMETRICS/IFIP PERFORMANCE*, 2024
- [P2] Beyond Proximity: Exploring Remote Cloud Peering  
**Esteban Carisimo**, Mia Weaver, Paul Barford, Fabián E. Bustamante  
*Proc. of SIGCOMM Posters*, 2024
- [P1] Revealing Hidden Secrets: Decoding DNS PTR records with Large Language Models  
Kedar Thiagarajan, **Esteban Carisimo**, Fabián E. Bustamante  
*Proc. of SIGCOMM Posters*, 2024

## Software, Systems and Datasets

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### SYSTEMS

**Splash** Submarine Cable Failure Detection [splash.aqualab.cs.northwestern.edu](https://github.com/estcarisimo/splash)

### TOOLS

**Jitterbug** Network Congestion Inference tool <https://www.github.com/estcarisimo/jitterbug>  
**as2org+** AS-to-Organizations mapping tool <https://github.com/NU-AquaLab/as2orgplus>

### DATASET

**State-Owned ASes** List of ASes of State-Owned Internet Providers <https://www.github.com/estcarisimo/state-owned-ases>

## Talks

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- [T10] A hop away from everywhere: A view of the intercontinental long-haul infrastructure.  
**Esteban Carisimo**  
, 2024, AIMS-IYP UCSD, La Jolla, CA, USA
- [T9] A hop away from everywhere: A view of the intercontinental long-haul infrastructure.  
**Esteban Carisimo**  
, 2024, SIGMETRICS, Venice, Italy
- [T8] El Dilema Digital de los Gobiernos: Entre Autonomia y Tercerizacion  
**Esteban Carisimo**  
2024, Universidad de San Andres, San Fernando, Buenos Aires, Argentina
- [T7] as2org+: Enriching AS-to-Organization Mappings with PeeringDB  
**Esteban Carisimo**  
2023, PAM, Virtual Event
- [T6] Unexpected Peering Connections to the Cloud: Going the distance when you don't have to  
**Esteban Carisimo**

2023, AIMS-IYP UCSD, La Jolla, CA, USA

- [T5] Unexpected Peering Connections to the Cloud: Going the distance when you don't have to  
**Esteban Carisimo**

2023, University of Wisconsin-Madison, Madison, WI, USA

- [T4] Jitterbug: A new framework for jitter-based congestion inference  
**Esteban Carisimo**

2022, PAM, Virtual Event

- [T3] Identifying ASes of State-Owned Internet Operators  
**Esteban Carisimo**

2021, IMC, Virtual Event

- [T2] Studying the Evolution of Content Providers in the Internet Core  
**Esteban Carisimo**

2018, LACNOG, Rosario, Argentina

- [T1] Studying the Evolution of Content Providers in the Internet Core  
**Esteban Carisimo**

2018, TMA, Vienna, Austria

## Press and Broader Impact

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2024 **APNIC Blog**, (Invited) A hop away from everywhere long-haul links in today's Internet

2022 **APNIC Blog**, (Invited) Identifying Autonomous Systems of state-owned Internet operators

## Teaching

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### CS340 - Introduction to Computer Networking

*Northwestern University*

Instructor

*Jan 2022 - Present*

- Quarters:
  - Fall 2024 (Enrollment: 80, CTEC: )
  - Fall 2023 (Enrollment: 78, CTEC: 5.04/ 6.00)
  - Fall 2022 (Enrollment: 67, CTEC: 4.83/ 6.00)
  - Winter 2022 (Enrollment: 134, CTEC: 4.20 / 6.00)
- Website: <https://northwestern-cs340.github.io/>

### 75.43 - Introduction to Distributed Systems

*Universidad de Buenos Aires*

Instructor

*Jul 2019 - Apr 2021*

- Semesters: S2-2020, S1-2020, S2-2019
- Equivalent to Northwestern's CS340 - Introduction to Computer Networking

### 75.43 - Introduction to Distributed Systems

*Universidad de Buenos Aires*

Head of Teaching Assistants

*Mar 2017 - Jul 2019*

- Semesters: S1-2019, S2-2018, S1-2018, S1-2017
- Equivalent to Northwestern's CS340 - Introduction to Computer Networking

## Service

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### DEPARTMENT SERVICE

#### Latin CS

*Northwestern University*

Faculty Advisor

*Jan 2023 - Jun 2023*

- Student organization for self-identified as Latin American/ Latinx / Hispanic.
- Temporary invited to represent the faculty in mentoring the organization.

#### Admission Committee for the PhD in Computer Science

*Northwestern University*

Committee Member

*Jan 2022 - Jan 2023*

- Representing the System and Networking area.

#### Curriculum Committee of the CSE Undergraduate Program

*Universidad de Buenos Aires*

Faculty Representative

*Jun 2019 - Apr 2021*

- Co-governed board composed of faculty (3), graduate (2), and student (1) members

### CONFERENCE COMMITTEES AND JOURNAL REVIEWS

#### General Chair

- PAM 2024

### Program Committee Member

- 2025: IMC, PAM, SIGMETRICS
- 2024: IMC, TMA
- 2023: IMC, PAM
- 2022: PAM, IMC (Only Poster Session)

### External Reviewer

- ACM/IEEE Transaction on Networking (ToN)
- ACM SIGCOMM Computer Communications Review (CCR)

## Mentoring

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### MASTER STUDENTS OR EQUIVALENT

1. **Mauricio Buzzone**. Advisor. Universidad de Buenos Aires. *Oct 2023 - Present*
2. **Lukas De Angelis Riva**. Advisor. Universidad de Buenos Aires. *Oct 2023 - Present*
3. **Santiago Klein**. Advisor. Universidad de Buenos Aires. *Jan 2023 - Sep 2023*
4. **Nicolas Aguerre**. Advisor. Universidad de Buenos Aires. *Jan 2023 - Sep 2023*
5. **Raghul Ravi**. Advisor. Northwestern University. *Sep 2022 - Jun 2023*
6. **Aman Khalid**. Advisor. Northwestern University. *Jun 2022 - Dec 2022*
7. **Cecilia Hortas**. Advisor. Universidad de Buenos Aires. *Sep 2021 - Dec 2022*
8. **Camila Bojman**. Advisor. Universidad de Buenos Aires. *Sep 2021 - Dec 2022*
9. **Manuel Ruiz Echazu**. Advisor. Universidad de Buenos Aires. *Sep 2021 - Aug 2022*
10. **Tomas Botalla**. Advisor. Universidad de Buenos Aires. *Sep 2021 - Aug 2022*
11. **Augusto Arturi**. Advisor. Universidad de Buenos Aires. *Sep 2020 - Aug 2021*
12. **Rodrigo Zapico**. Advisor. Universidad de Buenos Aires. *Sep 2020 - Jun 2021*
13. **Martín Errázquin**. Advisor. Universidad de Buenos Aires. *Sep 2020 - Jun 2021*
14. **Sofía Morseletto**. Advisor. Universidad de Buenos Aires (joint w University of Luxembourg). *Jan 2019 - Apr 2020*

## Languages

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**English** Proficient  
**Spanish** Native  
**Italian** Fluent

References available upon request.