

## RESEARCH OVERVIEW

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My research brings a data-driven approach to understanding and improving the Internet’s performance and security. I build systems that collect data about network, operator, and attacker behaviors. I use quantitative analysis, including rigorous statistics, on the data my systems collect to surface operational challenges and threats.

## POSITIONS

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- Assistant Professor, Electrical and Computer Engineering, *University of California, Los Angeles*      July 2024–Present
- Research Scientist, *Censys*      June 2024–Present
- Graduate Research Fellow, *Netflix*      June 2023–May 2024

## EDUCATION

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- Ph.D. in Computer Science, *Stanford University*      2018–2024  
*Dissertation:* “A Comprehensive and Real-Time View of the Internet Service Ecosystem”  
*Advisor:* Zakir Durumeric
- M.S. in Computer Science, *University of California, San Diego*      2017–2018  
*Thesis:* “Building and Breaking Burst-Parallel Systems”  
*Advisors:* Geoff Voelker and George Porter
- B.S. in Computer Science, *University of California, San Diego*      2014–2017  
*Minor:* Mathematics

## HONORS AND AWARDS

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- Forbes 30 Under 30, Science      2025
- Invited Mentor for Pulse Research Fellows, Internet Society      2025
- EECS Rising Star, International Recognition      2023
- Community Impact Award, Stanford University      2023
- Student Services Award, Stanford University Computer Science Department      2023
- Community Contribution Paper Award, ACM Internet Measurement Conference      2022
- Graduate Research Fellowship, National Science Foundation (“NSF GRFP”)      2018
- Graduate Fellowship in Science and Engineering, Stanford University (“Stanford SGF”)      2018
- Department Award for Excellence in Teaching, UC San Diego      2018

## PUBLICATIONS

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† indicates mentee, \* indicates co-first authorship

### Conference Proceedings

- [1] L. **Izhikevich**, R. Engardt, T. Huang, and R. Teixeira, “A Global Perspective on the Past, Present, and Future of Video Streaming over Starlink”, in *ACM SIGMETRICS/IFIP Performance*, 2025.
- [2] K. Izhikevich†, G. Voelker, S. Savage, and L. **Izhikevich**, “Using Honeybuckets to Characterize Serverless Storage Scanning in the Wild”, in *IEEE European Symposium on Security and Privacy*, 2024.
- [3] L. **Izhikevich**, M. Tran†, K. Izhikevich†, G. Akiwate, and Z. Durumeric, “Democratizing LEO Satellite Network Measurement”, in *ACM SIGMETRICS/IFIP Performance*, 2024.
- [4] L. **Izhikevich**, M. Tran†, M. Kallitsis, A. Fass, and Z. Durumeric, “Cloud Watching: Understanding Attacks Against Cloud-Hosted Services”, in *Proceedings of the 23rd ACM Internet Measurement Conference*, 2023.
- [5] L. **Izhikevich**, G. Akiwate, B. Berger†, S. Drakontaidis†, A. Ascherman†, P. Pearce, D. Adrian, and Z. Durumeric, “ZDNS: A Fast DNS Toolkit for Internet Measurement”, in *Proceedings of the 22nd ACM Internet Measurement Conference*, **★Community Contribution Award★**, 2022.
- [6] L. **Izhikevich**, R. Teixeira, and Z. Durumeric, “Predicting IPv4 Services Across All Ports”, in *Proceedings of the ACM SIGCOMM Conference*, 2022.
- [7] M. Ziv†, L. **Izhikevich**, K. Ruth, K. Izhikevich†, and Z. Durumeric, “ASdb: A System for Classifying Owners of Autonomous Systems”, in *Proceedings of the 21st ACM Internet Measurement Conference*, 2021.
- [8] J. Cable\*†, D. Gregory\*†, L. **Izhikevich**\*, and Z. Durumeric, “Stratosphere: Finding Vulnerable Cloud Storage Buckets”, in *Proceedings of the 24th International Symposium on Research in Attacks, Intrusions and Defenses*, 2021.
- [9] L. **Izhikevich**, R. Teixeira, and Z. Durumeric, “LZR: Identifying Unexpected Internet Services”, in *30th USENIX Security Symposium*, 2021.
- [10] G. Wan, L. **Izhikevich**, D. Adrian, K. Yoshioka, R. Holz, C. Rossow, and Z. Durumeric, “On the Origin of Scanning: The Impact of Location on Internet-Wide Scans”, in *ACM Internet Measurement Conference*, 2020.
- [11] L. Ao, L. **Izhikevich**, G. M. Voelker, and G. Porter, “Sprocket: A Serverless Video Processing Framework”, in *Proceedings of the Ninth ACM Symposium on Cloud Computing*, 2018.
- [12] L. **Izhikevich**, E. Peterson, and B. Voytek, “Neural oscillatory power is not Gaussian distributed across time”, in *Program No. 271.03. 2016 Neuroscience Meeting Planner*, 2016.

### Books

- [13] N. Moshiri and L. **Izhikevich**, *Design and Analysis of Data Structures*. 2016, ISBN: 978-1981017232.

### Pre-Prints

- [14] L. **Izhikevich**, R. Gao, E. Peterson, and B. Voytek, “Measuring the average power of neural oscillations”, *bioRxiv*, 2018. eprint: <https://www.biorxiv.org/content/early/2018/10/13/441626.full.pdf>.

## Thesis

- [15] L. **Izhikevich**, “Building and Breaking Burst-Parallel Systems”, M.S. thesis, University of California, San Diego, 2018.
- [16] L. **Izhikevich**, “A Comprehensive and Real-Time View of the Internet Service Ecosystem”, Ph.D. dissertation, Stanford University, 2024.

## PROFESSIONAL SERVICE

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### Technical Program Committees

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| • Internet Measurement Conference                            | 2023–Current |
| • SIGCOMM Next-Generation Network Observability Workshop     | 2025         |
| • IEEE Security and Privacy                                  | 2023         |
| • Symposium on Research in Attacks, Intrusions, and Defenses | 2022–2023    |
| • The Passive and Active Measurement Conference              | 2022         |
| • IEEE Security and Privacy (External Reviewer)              | 2022         |
| • USENIX Security (External Reviewer)                        | 2019–2022    |
| • Internet Measurement Conference (External Reviewer)        | 2019–2021    |

### Department and University Service

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| • Founder and Organizer of the Cross-Department Security Seminar, UCLA         | 2024–Current |
| • Computer Engineering Faculty Search Committee – Chalk Talk Coordinator, UCLA | 2025–Current |
| • Data Science Faculty Search Committee, Stanford University                   | 2022–2023    |
| • Ethics & Society Review of HAI Seed Grants Committee, Stanford University    | 2022         |
| • Chair of Ph.D. Applicant Support Program, Stanford University                | 2021–2023    |
| • Ph.D. Admissions Committee, Computer Science, Stanford University            | 2019–2022    |

### External Service

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| • Mentor for Pulse Research Fellows, Internet Society | 2025 |
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## TEACHING

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| • <b>Instructor</b> at UCLA  | Spring 2025 |
| <i>ECE239AS: Topics in Computer Networking Measurement and Security, <a href="https://lizizhikevich.github.io/ECE239AS-NetSec/">lizizhikevich.github.io/ECE239AS-NetSec/</a></i> |             |
| • <b>Co-Creator of Course/Co-Lecturer</b> at Stanford University   | Fall 2021   |
| <i>CS249i: The Modern Internet, <a href="https://cs249i.stanford.edu/">/cs249i.stanford.edu/</a></i>   |             |

## STUDENTS

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(only those who published a peer-reviewed article with me)

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| • Manda Tran (M.S., Ph.D.), Katherine Izhikevich (B.S/M.S/Ph.D.)              | Current   |
| • Briana Berger (B.S/M.S.), Spencer Drakontaidis (B.S.), Anna Ascherman (B.S) | 2021–2022 |
| • Jack Cable (B.S.), Drew Gregory (B.S.), Maya Ziv (M.S.)                     | 2020–2021 |

## SPEAKING

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- A Global Perspective on the Past, Present, and Future of Low Earth Orbit Satellite Networks  
Invited at Stanford University March'25
- How to Succeed at Early Career Research  
Invited Panelist at the Internet Measurement Conference October'24; Invited Panelist on the Networking Channel March '25
- A Global Perspective on the Past, Present, and Future of Video Streaming over Starlink  
Invited at Netflix May'24; ACM SIGMETRICS June '25;
- Democratizing LEO Satellite Network Measurement  
Invited at Netflix June'23; ACM SIGMETRICS June'24
- How to give an interesting talk for a SIGCOMM/NSDI audience  
Invited Panelist on the Networking Channel March '23
- Cloud Watching: Understanding Attacks Against Cloud-Hosted Services  
ACM Internet Measurement Conference October'22
- ZDNS: A Fast DNS Toolkit for Internet Measurement  
ACM Internet Measurement Conference October'22
- Predicting IPv4 Services Across All Ports  
ACM SIGCOMM August'22
- Finding Vulnerable Cloud Storage Buckets  
Symposium on Research in Attacks, Intrusions, and Defenses October'21; Invited for UC San Diego Security Seminar '22
- Identifying Unexpected Internet Services  
USENIX Security '21; Invited for Cornell Tech Security Seminar '21; Invited for Stanford Security Symposium'22
- Sprocket: A Serverless Video Processing Framework  
UC San Diego Systems Seminar '18

## REFERENCES

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### **Zakir Durumeric**

Assistant Professor of Computer Science  
Stanford University

### **Geoffrey Voelker**

Professor of Computer Science and Engineering  
University of California, San Diego

### **Stefan Savage**

Professor of Computer Science and Engineering  
University of California, San Diego

### **Renata Cruz Teixeira**

Former Director of Research; Current Senior Research Scientist  
Inria, Paris; Netflix