Calvin (Cal) Newport

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Education

Massachusetts Institute of Technology. *Cambridge, MA.*
Ph.D. Computer Science, 2009.
Advisor: Nancy Lynch. Thesis: *Distributed Computation on Unreliable Radio Channels.*

Massachusetts Institute of Technology. *Cambridge, MA.*
M.S. Computer Science, 2006. Advisors: Nancy Lynch and Gregory Chockler.
Thesis: *Consensus and Collision Detectors in Wireless Ad Hoc Networks.*

Dartmouth College. *Hanover, NH.*
A.B. Computer Science (High Honors in the Major), 2004, *Summa Cum Laude.*

Employment

Professor (*with tenure*), Department of Computer Science, Georgetown University.
August 2024 - current

Research Professor (*secondary appointment*), Center for Digital Ethics, Georgetown University.
September 2023 - current

Provost's Distinguished Associate Professor (*with tenure*), Department of Computer Science, Georgetown University. *February 2017 - August 2024*

Associate Professor (*with tenure*), Department of Computer Science, Georgetown University.
August 2016 - February 2017

Assistant Professor, Department of Computer Science, Georgetown University.
August 2011 - 2016

Recent Academic Honors

Montgomery Fellowship, Dartmouth College, June–August 2023.

Best Paper Award, International Symposium on Distributed Computing (DISC); awarded for *Smoothed Analysis of Information Spreading in Dynamic Networks*, October 2022.

Best Paper Award, International Conference on Principles of Distributed Systems (OPODIS); awarded for *On Simple Back-Off in Unreliable Radio Networks*, December 2018.

Provost's Distinguished Associate Professor, Georgetown University, February 2017.

Peer-Reviewed Publications

Notice that in theoretical computer science journals, conferences, and workshops, as in mathematics, the authors are typically listed in alphabetical order—not in order of contribution. The † symbol is used below to indicate the small number of publications in which the alphabetical order convention was not used.

Journal Publications

Michael Dinitz, Jeremy T. Fineman, Seth Gilbert, Calvin Newport. Smoothed Analysis of Information Spreading in Dynamic Networks. Journal of the ACM 71(3): 1–24 (2024)

Seth Gilbert, Nancy Lynch, Calvin Newport and Dominik Pajak. On Simple Back-Off in Unreliable Radio Networks. Theoretical Computer Science 806: 489–508 (2020).

Jeremy Fineman, Seth Gilbert, Fabian Kuhn, and Calvin Newport. Contention Resolution on a Fading Channel. Distributed Computing 32 (6): 517–533 (2019).

Michael Dinitz, Jeremy Fineman, Seth Gilbert and Calvin Newport. Smoothed Analysis of Dynamic Networks. Distributed Computing 31(4): 273–287 (2018).

Christoph Lenzen, Nancy Lynch, Calvin Newport and Tsvetomira Radeva. Searching Without Communicating: Tradeoffs Between Performance and Selection Complexity. Distributed Computing 30: 169–191 (2017).

Seth Gilbert, Calvin Newport, and Chaodong Zheng. Who Are You? Secure Identities in Ad Hoc Networks. *Distributed Computing* 30(2): 103–125 (2017).

† Ranit Mishori, Lisa Singh, Brendan Levy, and Calvin Newport. Mapping Physician Twitter Networks: Describing How They Work as a First Step in Understanding Connectivity, Information Flow, and Message Diffusion. *Journal of Medical Internet Research*, 16(4): 2014.

Keren Censor-Hillel, Seth Gilbert, Fabian Kuhn, Nancy Lynch, and Calvin Newport. Structuring Unreliable Radio Networks *Distributed Computing* 27(1): 1–19 (2014).

† Alejandro Cornejo, Calvin Newport, Subha Gollakota, Jayanthi Rao, and T.J. Giuli. Prioritized Gossip in Vehicular Networks. *Ad Hoc Networks* 11(1): 397–409 (2013).

Fabian Kuhn, Nancy Lynch, and Calvin Newport. The Abstract MAC Layer. *Distributed Computing* 24(3): 187–296 (2011).

† Calvin Newport and Nancy Lynch. Modeling Radio Networks. *Distributed Computing*, 24(2): 101–118 (2011).

Rachid Guerraoui, Maurice Herlihy, Petr Kouznetsov, Nancy Lynch and Calvin Newport. On the Weakest Failure Detector Ever. *Distributed Computing*, 21(5): 353–366 (2009).

Seth Gilbert, Rachid Guerraoui and Calvin Newport. Of Malicious Motes and Suspicious Sensors: On the Efficiency of Malicious Interference in Wireless Networks. *Theoretical Computer Science*, 410: 546–569 (2009).

Gregory Chockler, Murat Demirbas, Seth Gilbert, Nancy Lynch, Calvin Newport and Tina Nolte. Consensus and Collision Detectors in Radio Networks. *Distributed Computing*, 21(1): 55–84 (2008).

† Calvin Newport, David Kotz, Yougu Yuan, Robert Gray, Jason Liu and Chip Elliott. Experimental Evaluation of Wireless Simulation Assumptions. *Simulation*, 83(9): 643–661 (2007).

† Jason Liu, Yougu Yuan, David Nicol, Robert Gray, Calvin Newport, David Kotz and Luiz Felipe Perrone. Empirical Validation of Wireless Models in Simulations of Ad Hoc Routing Protocols. *Simulation*, 81(4): 307–323 (2005).

Conference Publications

Michael Dinitz, Jeremy T. Fineman, Seth Gilbert, Calvin Newport. Smoothed Analysis of Information Spreading in Dynamic Networks. Proceedings of the International Symposium on Distributed Computing (DISC). October 2022. **Winner of Best Paper Award.**

Calvin Newport, Nitin Vaidya, Alex Weaver. Preparing for Disaster: Leveraging Precomputation to Efficiently Repair Graph Structures Upon Failures. Proceedings of the ACM Symposium on Parallelism in Algorithms and Architectures (SPAA). July 2022.

Seth Gilbert, Calvin Newport, Nitin Vaidya, and Alex Weaver. Contention Resolution with Predictions. Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC). July 2021.

Calvin Newport, Alex Weaver, and Chaodong Zheng. Asynchronous Gossip in Smartphone Peer-to-Peer Networks. Proceedings of the IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS). July 2021.

Michael Dinitz, Magnus M. Halldorsson, Calvin Newport and Alex Weaver. The Capacity of Smartphone Peer-to-Peer Networks. Proceedings of the International Symposium on Distributed Computing (DISC). October 2019.

Seth Gilbert, James Maguire, and Calvin Newport. On Bioelectric Algorithms. Proceedings of the International Symposium on Distributed Computing (DISC). October 2019.

Michael Dinitz, Magnus Halldorsson, Taisuke Izumi, and Calvin Newport. Distributed Minimum Degree Spanning Trees. Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC). July 2019.

Calvin Newport and Alex Weaver. Random Gossip Processes in Smartphone Peer-to-Peer Networks. Proceedings of the IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS). May 2019.

Seth Gilbert, Nancy Lynch, Calvin Newport and Dominik Pajak. On Simple Back-Off in Unreliable Radio Networks. Proceedings of the International Conference on Principles of Distributed Systems (OPODIS). December 2018. **Winner of Best Paper Award.**

Calvin Newport and Chaodong Zheng. Approximate Neighbor Counting in Radio Networks. Proceedings of the International Conference on Principles of Distributed Systems (OPODIS). December 2018.

Calvin Newport and Peter Robinson. Fault-Tolerant Consensus with an Abstract MAC Layer. Proceedings of the International Symposium on Distributed Computing (DISC). October 2018.

Magnus Halldorsson, Fabian Kuhn, Nancy Lynch and Calvin Newport. An Efficient Communication Abstraction for Dense Wireless Networks. Proceedings of the International Symposium on Distributed Computing (DISC). October 2017.

Calvin Newport. Gossip in a Smartphone Peer-to-Peer Network. Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC). July 2017.

Seth Gilbert and Calvin Newport. Symmetry Breaking with Noisy Processes. Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC). July 2017.

Calvin Newport. Leader Election in a Smartphone Peer-to-Peer Network. Proceedings of the IEEE International Parallel and Distributed Processing Symposium (IPDPS). May 2017.

Michael Dinitz, Jeremy Fineman, Seth Gilbert and Calvin Newport. Load Balancing with Bounded Convergence in Dynamic Networks. Proceedings of the IEEE Conference on Computer Communications (INFOCOM). April 2017.

Mohsen Ghaffari and Calvin Newport. How to Discreetly Spread a Rumor in a Crowd. Proceedings of the International Symposium on Distributed Computing (DISC). September 2016.

Jeremy Fineman, Calvin Newport, and Tonghe Wang. Contention Resolution on Multiple Channels with Collision Detection. Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC). July 2016.

Jeremy Fineman, Seth Gilbert, Fabian Kuhn, and Calvin Newport. Contention Resolution on a Fading Channel. Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC). July 2016. **Invited for Journal Submission.**

Mohsen Ghaffari and Calvin Newport. Leader Election in Unreliable Radio Networks. Proceedings of the International Colloquium on Automata, Languages, and Programming (ICALP). July 2016.

Seth Gilbert, Calvin Newport, and Tonghe Wang. Bounds for Blind Rate Adaptation. Proceedings of the International Conference on Principles of Distributed Systems (OPODIS). December 2015.

Seth Gilbert and Calvin Newport. The Computational Power of Beeps. Proceedings of the International Symposium on Distributed Computing (DISC). October 2015.

Michael Dinitz, Jeremy Fineman, Seth Gilbert and Calvin Newport. Smoothed Analysis of Dynamic Networks. Proceedings of the International Symposium on Distributed Computing (DISC). October 2015. **Invited for Journal Submission.**

Seth Gilbert, Fabian Kuhn, Calvin Newport and Chaodong Zheng. Efficient Communication in Cognitive Radio Networks. Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC). July 2015.

Nancy Lynch and Calvin Newport. A (Truly) Local Broadcast Layer for Unreliable Radio Networks. Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC). July 2015.

Calvin Newport and Wenchao Zhou. The (Surprising) Computational Power of the SDN Data Plane. Proceedings of the IEEE Conference on Computer Communications (INFOCOM). April 2015.

† Henry Tan, Chris Wacek, Calvin Newport, and Micah Sherr. A Disruption-Resistant MAC Layer for Multichannel Wireless Networks. In *Proceedings of the International Conference on Principles of Distributed Systems (OPODIS)*. December 2014.

Calvin Newport. Radio Network Lower Bounds Made Easy. In *Proceedings of the International Symposium on Distributed Computing (DISC)*. October 2014.

Calvin Newport. Lower Bounds for Structuring Unreliable Radio Networks. In *Proceedings of the International Symposium on Distributed Computing (DISC)*. October 2014.

Seth Gilbert, Calvin Newport and Chaodong Zheng. Who Are You? Secure Identities in Ad-Hoc Networks. In *Proceedings of the International Symposium on Distributed Computing (DISC)*. October 2014.

Calvin Newport. Consensus with an Abstract MAC Layer. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2014.

Mohsen Ghaffari, Erez Kantor, Calvin Newport and Nancy Lynch. Multi-Message Broadcast with Abstract MAC Layers and Unreliable Links. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2014.

Christoph Lenzen, Nancy Lynch, Calvin Newport, and Tsvetomira Radeva. Trade-offs Between Selection Complexity and Performance when Searching the Plane without Communication. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2014.

Nimantha Baranasuriya, Seth Gilbert, Calvin Newport, and Jaynathi Rao. Aggregation in Smartphone Sensor Networks. In *Proceedings of the IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS)*. May 2014.

Jeremy Fineman, Calvin Newport, Micah Sherr, and Tonghe Wang. Fair Maximal Independent Sets. In *Proceedings of the IEEE International Parallel and Distributed Processing Symposium (IPDPS)*. May 2014.

† Calvin Newport, Lisa Singh, and Yiqing Ren. Short Paper: Membership Detection Using Cooperative Data Mining Algorithms. In *Proceedings of the SIAM International Conference on Data Mining (SDM)*. April 2014.

Sebastian Daum, Seth Gilbert, Fabian Kuhn, and Calvin Newport. Broadcast in the Ad Hoc SINR Model. In *Proceedings of the International Symposium on Distributed Computing (DISC)*. October 2013.

Mohsen Ghaffari, Nancy Lynch, and Calvin Newport. The Cost of Radio Network Broadcast for Different Models of Unreliable Links In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2013.

Sebastian Daum, Seth Gilbert, Mohsen Ghaffari, Fabian Kuhn, and Calvin Newport. Maximal Independent Sets in Multichannel Radio Networks In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2013.

Jeremy Fineman, Calvin Newport, and Tonghe Wang. Brief Announcement: Fair Maximal Independent Sets in Trees In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2013.

Calvin Newport. Brief Announcement: A Shorter and Stronger Proof of an $\Omega(D \log n/D)$ Lower Bound on Broadcast in Radio Networks In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2013.

Mohsen Ghaffari, Seth Gilbert, Calvin Newport and Henry Tan. Optimal Broadcast in Shared Spectrum Radio Networks In *Proceedings of the International Conference on Principle of Distributed Systems (OPODIS)*. December 2012.

Sebastian Daum, Fabian Kuhn, and Calvin Newport. Efficient Symmetry Breaking in Multi-Channel Radio Networks In *Proceedings of the International Symposium on Distributed Computing (DISC)*. October 2012.

Mohsen Ghaffari, Bernhard Haeupler, Nancy Lynch, and Calvin Newport. Bounds on Contention Management in Radio Networks. In *Proceedings of the International Symposium on Distributed Computing (DISC)*. October 2012.

Alejandro Cornejo, Seth Gilbert, and Calvin Newport. Aggregation in Dynamic Networks. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2012.

Sebastian Daum, Seth Gilbert, Fabian Kuhn, and Calvin Newport. Leader Election in Shared Spectrum Networks. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2012.

Shlomi Dolev, Seth Gilbert, Majid Khabbazian and Calvin Newport. Leveraging Channel Diversity to Gain Efficiency and Robustness for Wireless Broadcast. In *Proceedings of the International Symposium on Distributed Computing (DISC)*. September 2011.

† Jiang Wu, Nancy Griffeth, Calvin Newport, and Nancy Lynch. Engineering the Virtual Node Layer for Reactive MANET Routing. In *Proceedings of the International Symposium on Network Computing and Applications (NCA)*. August 2011.

Keren Censor-Hillel, Seth Gilbert, Fabian Kuhn, Nancy Lynch and Calvin Newport. Structuring Unreliable Radio Networks. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. June 2011.

† Lenin Ravindranath, Calvin Newport, Hari Balakrishnan, and Sam Madden. Improving Wireless Network Performance Using Sensor Hints. In *Proceedings of the USENIX Symposium on Networked Systems Design and Implementation (NSDI)*. March 2011.

Fabian Kuhn, Nancy Lynch, Calvin Newport, Rotem Oshman, and Andrea Richa. Broadcasting in Radio Networks with Unreliable Communication. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2010.

Dan Alistarh, Seth Gilbert, Rachid Guerraoui, Zarko Milosevic and Calvin Newport. Securing Every Bit: Authenticated Broadcast in Radio Networks. In *Proceedings of the ACM Symposium on Parallelism in Algorithms and Architectures (SPAA)*. June 2010.

Fabian Kuhn, Nancy Lynch, and Calvin Newport. The Abstract MAC Layer. In *Proceedings of the International Symposium on Distributed Computing (DISC)*. September 2009. **Selected for Special Awards Session. Invited for Journal Submission.**

† Calvin Newport and Nancy Lynch. Modeling Radio Networks. In *Proceedings of the International Conference on Concurrency Theory (CONCUR)*. August 2009. **Invited for Journal Submission.**

Shlomi Dolev, Seth Gilbert, Rachid Guerraoui, Fabian Kuhn and Calvin Newport. The Wireless Synchronization Problem. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. August 2009.

† Jiang Wu, Nancy Griffeth, Nancy Lynch, Calvin Newport, and Ralph Droms. Using Virtual Infrastructure to Adapt Wireline Protocols to MANET. In *Proceedings of the International Symposium on Network Computing and Applications (NCA)*. July 2009. **Winner of Best Paper award.**

Seth Gilbert, Rachid Guerraoui, Darek Kowalski and Calvin Newport. Interference-Resilient Information Exchange. In *Proceedings of the IEEE Conference on Computer Communications (INFOCOM)*. April 2009.

Shlomi Dolev, Seth Gilbert, Rachid Guerraoui and Calvin Newport. Secure Communication Over Radio Channels. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. August 2008.

Ling Cheung and Calvin Newport. Provably Secure Ciphertext Policy ABE. In *Proceedings of the ACM Conference on Computer and Communications Security (CCS)*. October 2007.

Shlomi Dolev, Seth Gilbert, Rachid Guerraoui and Calvin Newport. Gossiping in a Multi-Channel Radio Network: An Oblivious Approach to Coping with Malicious Interference. In *Proceedings of the International Symposium on Distributed Computing (DISC)*. September 2007.

Rachid Guerraoui, Maurice Herlihy, Petr Kouznetsov, Nancy Lynch and Calvin Newport. On the Weakest Failure Detector Ever. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. August 2007. **Invited for Journal Submission.**

Seth Gilbert, Rachid Guerraoui and Calvin Newport. Of Malicious Motes and Suspicious Sensors: On the Efficiency of Malicious Interference in Wireless Networks. In *Proceedings of the International Conference On Principles Of Distributed Systems (OPODIS)*. December 2006. **Invited for Journal Submission.**

Gregory Chockler, Murat Demirbas, Seth Gilbert and Calvin Newport. A Middleware Framework for Robust Applications in Wireless Ad Hoc Networks. In *Proceedings of the Allerton Conference on Communication, Control, and Computing*. September 2005.

Gregory Chockler, Murat Demirbas, Seth Gilbert, Calvin Newport and Tina Nolte. Consensus and Collision Detectors in Wireless Ad Hoc Networks. In *Proceedings of the ACM Symposium on the Principles of Distributed Computing (PODC)*. July 2005.

† David Kotz, Calvin Newport, Robert Gray, Jason Liu, Yougu Yuan and Chip Elliott. Experimental Evaluation of Wireless Simulation Assumptions. In *Proceedings of the ACM International Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems*. October 2004.

† Robert Gray, David Kotz, Calvin Newport, Nikita Dubrovsky, Aaron Fiske, Jason Liu, Christopher Masone, Susan McGrath and Yougu Yuan. Outdoor Experimental Comparison of Four Ad Hoc Routing Algorithms. In *Proceedings of the ACM International Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems*. October 2004. **Finalist for Best Paper Award.**

Workshop Publications

† Lenin Ravindranath, Calvin Newport, Hari Balakrishnan, and Sam Madden. "Extra-Sensory Perception" for Wireless Networks. In *Proceedings of the ACM Workshop on Hot Topics in Networks (HOTNETS)*. October 2010.

Alex Cornejo and Calvin Newport. Prioritized Gossip in Vehicular Networks. In *Proceedings of the ACM SIGACT/SIGMOBILE International Workshop on Foundations of Mobile Computing (DIALM-POMC)*. September 2010. **Invited for Journal Submission.**

Ling Cheung, Joseph A. Cooley, Roger Khazan, and Calvin Newport. Collusion-Resistant Group Key Management Using Attribute-Based Encryption. In *Proceedings of the International Workshop on Group-Oriented Cryptographic Protocols*. July 2007.

Matthew Brown, Seth Gilbert, Nancy Lynch, Calvin Newport, Tina Nolte, and Michael Spindel. The Virtual Node Layer: A Programming Abstraction for Wireless Sensor Networks. In *Proceedings of the International Workshop on Sensor Network Architecture (WWSNA)*. April 2007.

Gregory Chockler, Murat Demirbas, Seth Gilbert, Nancy A. Lynch, Calvin Newport, and Tina Nolte. Reconciling the Theory and Practice of (Un)Reliable Wireless Broadcast. In *Proceedings of the International Workshop on Assurance in Distributed Systems and Networks (ADSN)*. June 2005

Technical Magazine Publications

Meg Leta Jones, Mac Milin Kiran, and Cal Newport. "Are We Tumbling Toward an Adults-Only Internet?" *ProMarket*. April 12, 2024

Cal Newport. "When Technology Goes Awry." *Communications of the ACM* 63(5): 49–52, 2020. *Peer Reviewed.*

Magnus Halldorsson and Calvin Newport. Making Wireless Algorithm Theory More Useful. *ACM SIGACT News* 45(3): 72–74, 2014.

Computer Science & Digital Ethics Presentations

Recalibrating for the Digital Age. The New Yorker Festival. New York, NY. October, 2025.

Why Can't I Focus? On Email, Smartphones, and the Age of Distraction. Crown Distinguished Lecture, Sanford School of Public Policy, Duke University. Durham, NC. October 2023.

How Worried Should We Be About AI? Dartmouth College Montgomery Lecture. Hanover, NH. July 2023

Senate Briefing on AI Technology. Bi-Partisan group of senators organized by Sen. Mark Warner. Washington, DC. June 2023.

Generative AI Panel. The Georgetown University Annual Board of Trustees Meeting. Washington, DC. June 2023.

Smoothed Analysis of Information Spreading in Dynamic Networks. The International Symposium on Distributed Computing (DISC). Augusta, GA. October 2022.

Depth in a Distracted World. Microsoft Research New England. August, 2021. *Virtual Lecture.*

Fault-Tolerant Consensus with an Abstract MAC Layer. The International Symposium on Distributed Computing (DISC). New Orleans, LA. October 2018.

Brief Announcement: On Simple Back-Off in Complex Radio Networks. The International Symposium on Distributed Computing (DISC). New Orleans, LA. October 2018.

The Unreasonable Effectiveness of Decay-Based Broadcasting in Radio Networks. Workshop on Advances in Distributed Graph Algorithms (ADGA). New Orleans, LA. October 2018. *Invited Lecture.*

Gossip in a Smartphone Peer-to-Peer Network. The ACM Symposium on the Principles of Distributed Computing (PODC). Washington, DC. July 2017.

Leader Election in a Smartphone Peer-to-Peer Network. The IEEE International Parallel and Distributed Processing Symposium (IPDPS). Orlando, FL. May 2017.

Contention Resolution on a Fading Channel. The ACM Symposium on the Principles of Distributed Computing (PODC). Chicago, Illinois. July 2016.

Notes on Noisy Distributed Computing. Workshop on Realistic Models for Algorithms in Wireless Networks (WRAWN). Chicago, Illinois. July 2016.

Notes on Noisy Distributed Computing. The Capital Area Theory Day (Johns Hopkins University). Baltimore, Maryland. May 2016.

A (Truly) Local Broadcast Layer for Unreliable Radio Networks. The ACM Symposium on the Principles of Distributed Computing (PODC). San Sebastian, Spain. July 2015.

Radio Network Lower Bounds Made Easy The Johns Hopkins Computer Science Theory Seminar. Baltimore, Maryland. October 2014.

Radio Network Lower Bounds Made Easy The International Symposium on Distributed Computing (DISC). Austin, Texas. October 2014.

Lower Bounds for Structuring Unreliable Radio Networks The International Symposium on Distributed Computing (DISC). Austin, Texas. October 2014.

Who are you? Secure Identities in Ad Hoc Networks. The International Symposium on Distributed Computing (DISC). Austin, Texas. October 2014.

How to Tame a Dynamic Network. Workshop on the Foundations of Mobile Computing. Philadelphia, PA. August 2014.

How to Tame a Dynamic Network. Workshop on Realistic Models for Algorithms in Wireless Networks (WRAWN). Paris, France. July 2014.

Consensus in an Abstract MAC Layer The ACM Symposium on the Principles of Distributed Computing (PODC). Paris, France. July 2014.

Multi-Message Broadcast with Abstract MAC Layers and Unreliable Links. The ACM Symposium on the Principles of Distributed Computing (PODC). Paris, France. July 2014.

How to Accomplish Important Things: Words of Advice from a Computer Scientist. Middlebury College, Computer Science Seminar. Middlebury, VT. March 2014.

Distributed Algorithms in a Wireless World. George Washington University, Computer Science Colloquium. Washington, DC. February 2014.

Thoughts on Models for Applied Distributed Wireless Algorithms. Dagstuhl Seminar on Wireless Algorithms. Dagstuhl, Germany. January 2014.

Distributed Algorithms in a Wireless World. Massachusetts Institute of Technology, Computer Science and Artificial Intelligence Laboratory Seminar. Cambridge, MA. November 2013.

Broadcasting in Radio Networks with Different Models of Unreliable Links. The ACM Symposium on the Principles of Distributed Computing (PODC). Montreal, CA. July 2013.

Fair Maximal Independent Sets in Trees. The ACM Symposium on the Principles of Distributed Computing (PODC). Montreal, CA. July 2013.

Why is Wireless Theory Ignored by Wireless Practice? Invited Talk at the Workshop on Realistic Models for Wireless Networks (WRAWN). Montreal, CA. July 2013.

How to Succeed in Graduate School. Duke University. Durham, NC. March 2013.

Distributed Algorithms in the Age of Open Airwaves. Virginia Tech, Department of Computer Science. Arlington, VA. March 2013.

Structuring Unreliable Radio Networks. The ACM Symposium on the Principles of Distributed Computing (PODC). San Jose, CA. June 2011.

Information Dissemination in Vehicle Networks. MIT CSAIL Industry Affiliates Annual Meeting. Cambridge, MA. May 2011.

Broadcasting in Radio Networks with Unreliable Communication. The ACM Symposium on the Principles of Distributed Computing (PODC). Zurich, Switzerland. July 2010.

Vehicular Networking: From Theory to Practice. Ford Motor Company. Dearborn, MI. April 2010.

Distributed Computing in the Age of Open Airwaves. The Dartmouth College Computer Science Colloquium. Hanover, NH. October 2009.

Distributed Computing in the Age of Open Airwaves. The MIT Theoretical Computer Science Colloquium. Cambridge, MA. September 2009.

Modeling Radio Networks. The International Conference on Concurrency Theory (CONCUR). Bologna, Italy. August 2009.

The Wireless Synchronization Problem. The ACM Symposium on the Principles of Distributed Computing (PODC). Calgary, Canada. August 2009.

Hardness of Broadcasting in Wireless Networks with Unreliable Communication. The ACM Symposium on the Principles of Distributed Computing (PODC). Calgary, Canada. August 2009.

Reliable Distributed Computing on Unreliable Radio Channels. The S^3 Workshop at the ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc). New Orleans, LA. May 2009.

Interference-Resilient Information Exchange. The IEEE Conference on Computer Communications

(INFOCOM). Rio de Janeiro, Brazil. April 2009.

Distributed Computing in the Age of Open Airwaves. Boston University. Boston, MA. April 2009.

Distributed Computing in the Age of Open Airwaves. The Brown University Theory Lunch. Providence, RI. January 2009.

Secure Communication Over Radio Channels. The ACM Symposium on the Principles of Distributed Computing (PODC). Toronto, Canada. August 2008.

Collusion-Resistant Group Key Management Using Attribute-Based Encryption. The International Workshop on Group-Oriented Cryptographic Protocols. Wroclaw, Poland. July 2007.

A Middleware Framework for Robust Applications in Wireless Ad Hoc Networks. The Allerton Conference on Communication, Control, and Computing. Allerton, IL. September 2005.

Grants

"AiTF: Collaborative Research: Algorithms for Smartphone Peer-to-Peer Networks," NSF CCF Award #1733842, 09/01/2017 to 08/31/2020, $319,578 (PI).

"EAGER: Noisy Computation of Distributed State Machines," NSF CCF Award #1649484, 9/1/2016 to 8/31/2018, $72,322 (PI).

"AF: Small: Algorithms for Wireless Networks with Dynamic Links," NSF CCF Award #1320279, 9/1/2013 to 8/31/2017, $319,461 (PI).

"Enabling Innovative Infotainment Applications with a Vehicle-to-Vehicle Communication API," Ford University Research Program (Funding Rate $< 10\%$), 6/1/2012 to 5/31/2015, $120,000

"Secrecy Preserving Signatures," Georgetown Security and Software Engineering Research Center (an NSF-Funded Industry/University Cooperative Research Center), Summer 2013, $15,000.

Student Supervision

Mac Milin Kiran. Master's student. (Fritz Fellow; supervised with Meg Leta Jones.) *2023 - 2024*

Alex Weaver. Doctoral student. *2017 - 2023*

Soumyottam Chatterjee. Postdoctoral associate. *2019 - 2020*

Tonghe Wang. Doctoral student. *2012 - 2017*

Welles Robinson. Undergraduate thesis (awarded honors). *2013 - 2014*

Teaching

Spring 2025, COSC 1110: Math Methods for Computer Science

Fall 2024, CSES Capstone

Spring 2024, COSC 1110: Math Methods for Computer Science

Fall 2023, COSC 526: Distributed Algorithms

Spring 2023, COSC 030: Math Methods for Computer Science

Spring 2022, COSC 030: Math Methods for Computer Science

Fall 2021, COSC 030: Math Methods for Computer Science, COSC 240: Introduction to Algorithms

Fall 2020, COSC 240: Introduction to Algorithms

Spring 2020, COSC 240: Introduction to Algorithms, COSC 545: Theory of Computation

Fall 2019, COSC 030: Math Methods for Computer Science

Spring 2019, COSC 841: Doctoral Seminar on Blockchain Theory, COSC 545: Theory of Computation

Fall 2018, COSC 240: Introduction to Algorithms

Fall 2017, COSC 240: Introduction to Algorithms

Spring 2017, COSC 844: Doctoral Semiar in Biological Algorithms, COSC 545: Theory of Computation

Fall 2016, COSC 030: Math Methods for Computer Science

Spring 2016, COSC 545: Theory of Computation, COSC 546: Distributed Algorithms

Fall 2015, COSC 030: Math Methods for Computer Science

Fall 2014, COSC 030: Math Methods for Computer Science, COSC 545: Theory of Computation

Fall 2013, COSC 242: Algorithms for Distributed Systems

Spring 2013, COSC 545: Theory of Computation, COSC 747: Wireless Network Algorithms

Spring 2012, COSC 545: Theory of Computation

Fall 2011, COSC 547: Distributed Computing Outside the Box

Professional Activities

Steering Committees

Symposium on Distributed Computing (DISC), since 2020

ACM Symposium on the Principles of Distributed Computing (PODC), 2016 - 2018

Workshop on Realistic Models for Algorithms in Wireless Networks (WRAWN), 2015 - 2017

Conference Organization

General Chair, ACM Symposium on the Principles of Distributed Computing (PODC), 2018

Treasurer, ACM Symposium on the Principles of Distributed Computing (PODC), 2017

Program Co-Chair, Workshop on Realistic Models for Algorithms in Wireless Networks (WRAWN), 2013, 2014, 2016

Program Co-Chair, International Workshop on Foundations of Mobile Computing (FOMC; formerly known as DIALM-POMC), 2012

Program Committees

Symposium on the Principles of Distributed Computing (PODC)

Symposium on Distributed Computing (DISC)

International Conference on Principles of Distributed Systems (OPODIS)

Symposium on Parallelism in Algorithms and Architectures (SPAA)

International Conference on Distributed Computing Systems (ICDCS)

Latin American Theoretical Informatics Symposium (LATIN)

International Conference on Networked Systems (NETSY)

International Conference on Distributed Computing and Networking (ICDCN)

International Colloquium on Structural Information and Communication Complexity (SIROCCO)

International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS)

International Conference on Distributed Computing in Sensor Systems (DCOSS)

Workshop on Biological Distributed Algorithms (BDA)

ACM Workshop on Foundations of Mobile Computing (FOMC, previously DIALM-POMC)

International Workshop on Algorithmic Aspects of Wireless Sensor Networks (ALGOSENSOR)

Journal Reviews

Journal of the ACM

ACM Mobile Computing and Communications Review

Theoretical Computer Science

Distributed Computing

IEEE/ACM Transactions on Networking

IEEE Transactions on Mobile Computing

IEEE Journal on Selected Areas in Communications

Information Processing Letters

IEEE Journal of Security and Communication Networks

IEEE Transactions on Computers

ACM Transactions on Sensor Networks

Journal of Systems and Software.

Conference Reviews

Symposium on Foundations of Computer Science (FOCS)

Symposium on Discrete Algorithms (SODA)

Symposium on the Principles of Distributed Computing (PODC)

Symposium on Distributed Computing (DISC)

International Conference on Principles of Distributed Systems (OPODIS)

Colloquium on Automata, Languages, and Programming (ICALP)

Symposium on Parallelism in Algorithms and Architecture (SPAA)

Innovations in Theoretical Computer Science (ITCS)

European Symposium on Algorithms (ESA)

Symposium on Theoretical Aspects of Computer Science (STACS)

Symposium on Mathematical Foundations of Computer Science (MFCS)

International Conference on Distributed Computing Systems (ICDCS)

International Parallel & Distributed Processing Symposium (IPDPS)

International Conference on Concurrency Theory (CONCUR)

The Latin American Theoretical Informatics Symposium (LATIN)

The International Conference on Networked Systems (NETSY)

International Conference on Distributed Computing and Networking (ICDCN)

International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS)

International Conference on Distributed Computing in Sensor Systems (DCOSS)

International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS)

Grant Proposal Review Panels

National Science Foundation: 2012, 2015, 2022

Service

University Service

Director, Computer Science Ethics and Society A.B. Degree Program 2023 -

The Georgetown University Pedagogy and AI Task Force, 2023 -

Co-Chair, Georgetown's Center for Digital Ethics Faculty Search Committee (tasked with hiring three cross-discipline tenure-line faculty positions), 2021 - 2022

Co-Chair, Technology Ethics and Society (TES) Working Group (tasked with launching three new TES-related academic programs within the College of Arts and Sciences), 2021 - 2022

Executive Council, College of Art and Sciences, 2015 - 2016, 2018 - 2019

Designed and taught 8-week online Alumni Bridge Course as part of Georgetown's *Designing the Future(s) of the University Initiative*, 2017

Departmental Service

Director of Undergraduate Studies, 2024 - 2026

TL and FTNTL Merit Evaluation Committee, 2022 - 2023

Chair of the CSES Major Committee, 2021 - 2022

Faculty Search Committee, 2021 - 2022

Director of Graduate Studies, 2019 - 2020

Graduate/Admissions Committee, 2013 - 2014, 2016 - 2020

Joint CS-Law Faculty Search Committee, 2016 - 2017

Undergraduate Committee, 2011 - 2015 2023 - 2026

Policy Committee, 2014 - 2015

Presentations for Georgetown Students, Staff, and Alumni

Note: *An important (and unique) component to my university service efforts are my frequent talks on topics related to my general-audience writing for Georgetown students, staff, and alumni.*

Thinking Forward: Technology as a Dynamic System. Georgetown John Carroll Weekend. Philadelphia, PA. April, 2025.

How does ChatGPT work? What can't it do? Georgetown Faculty Senate. Washington, DC. January 2024.

Generative AI Panel. The Georgetown University John Carroll Weekend. San Francisco, CA. April 2023.

Digital Minimalism. Georgetown Alumni Association Virtual Book Club. June 2020.

Digital Minimalism. Georgetown University Family Weekend. October 2019.

Is Our Relationship with Technology Broken? Georgetown University John Carroll Weekend. Boston, MA. May 2019.

Digital Minimalism. Georgetown University Library Author Lecture Series. April 2019.

E-mail 2.0. Workshop for the Staff Members of the Georgetown Center for Social Justice and the Georgetown Scholarship Program. August 2015.

How to Write a Dissertation: Panel Presentation/Discussion. Georgetown Graduate Student Organization's Thesis Writing Boot Camp. May 2015.

How to Succeed at Georgetown. The Georgetown Student-Athlete Leadership & Development Monthly Speaker Series. March 2015.

How to Write a Dissertation: Panel Presentation/Discussion. Georgetown Graduate Student Organization's Thesis Writing Boot Camp. March 2015.

How to Succeed at Georgetown. Key Note Address at the Georgetown Scholarship Program Thrive Summit. January 2015.

Why Following Your Passion is Bad Advice. Georgetown Alumni Career Services Webinar Program. November 2014.

How to Write a Dissertation: Panel Presentation/Discussion. Georgetown Graduate Student Organization's Thesis Writing Boot Camp. August 2014.

Writing About College. Georgetown Freshman Writing Course. April 2014.

How to Write a Dissertation: Panel Presentation/Discussion. Georgetown Graduate Student Organization's Thesis Writing Boot Camp. August 2013.

General Audience Books

Recent Books

Slow Productivity: The Lost Art of Accomplishment Without Overload. Portfolio/Penguin, March 2024. (*New York Times* bestseller; *Sunday Times* bestseller; *IndieBound* bestseller; Amazon Editor's #1 Business and Leadership Book of 2024 (so far).)

Technology and Culture Trilogy (2016 - 2021)

A World Without Email: Reimagining Work in an Age of Communication Overload. Portfolio/Penguin, March 2021. (*New York Times* bestseller.)

Digital Minimalism: Choosing a Focused Life in a Noisy World. Portfolio/Penguin, February 2019. (*New York Times* bestseller; 300,000+ copies sold.)

Deep Work: Rules for Focused Success in a Distracted World. Grand Central/Hachette, January 2016. (National bestseller; published in 40+ languages; 1,500,000+ copies sold.)

Earlier Books (2005 - 2012)

So Good They Can't Ignore You: Why Skills Trump Passion in the Quest for Work You Love. Grand Central/Hachette, September 2012. (300,000+ copies sold.)

How to Be a High School Superstar: A Revolutionary Plan to Get into College by Standing Out (Without Burning Out). Three Rivers/Random House, July 2010.

How to Become a Straight-A Student: The Unconventional Strategies Real College Students Use to Score High While Studying Less. Three Rivers/Random House, December 2006. (200,000+ copies sold.)

How To Win at College: Surprising Secrets for Success from the Country's Top Students. Three Rivers/Random House, April 2005.

General Audience Articles and Podcast

The New Yorker. In my role as a Contributing Writer for *The New Yorker*, I have published more than 20 articles since 2019. (`https://www.newyorker.com/contributors/cal-newport`)

Other Publications. I have also published numerous articles and op-eds for many well-known publications, including the *New York Times*, the *Atlantic*, *WIRED*, the *Chronicle of Higher Education*, and *Outside*.

Podcast. My podcast, *Deep Questions with Cal Newport*, has been downloaded more than 10,000,000 times since it was launched in the summer of 2020. It regularly ranks among the top technology podcasts on most major podcast charts.

Newsletter. My weekly email newsletter is sent to 100,000+ subscribers.

Recent Media Coverage

I am frequently featured in major media outlets as an expert on technology and its impact on various aspects of our society. Here is a summary of these appearances since 2019:

I have appeared on all three network morning shows (including multiple appearances on *Good Morning America*), as well as other television programs, such as *Amanpour and Company* on PBS, *Tha God's Honest Truth* on Comedy Central, *Communicators* on CSPAN, and the syndicated program, *Matter of Fact* with Soledad O'Brien.

I have been featured on most of NPR's major national news/interview programs, including *All Things Considered*, *Morning Edition*, *Here and Now* (multiple times), *On Point* (multiple times), *1A* (multiple times), *Innovation Hub* (multiple times), and *The New Yorker Radio Hour* (with David Remnick). I have also appeared on the influential syndicated radio show, *The Breakfast Club*.

I have been featured, interviewed, and reviewed in many major print publications, including *The New Yorker*, the *New York Times Magazine*, the *New York Times*, the *Financial Times Weekend Magazine* (cover story), the *Financial Times*, the *Wall Street Journal*, *WIRED*, *Vogue*, *Real Simple*, *GQ*, *The Week*, the *Sunday Times*, and the *Guardian*, among many others.