

# TEGAN WILSON

Cornell University PhD Candidate ◊ Ithaca, NY

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## EDUCATION

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- **PhD Candidate in Computer Science, Cornell University** Expected May 2024  
Advisor: Robert Kleinberg
- **M.S. in Computer Science, Cornell University** Earned December 2021  
Advisor: Robert Kleinberg
- **B.A. in Mathematics and Computer Science, Carleton College** Sept 2014 - June 2018  
Advisors: Layla Oesper and Mark Krusemeyer
- **Study Abroad**  
Budapest Semesters in Mathematics Fall 2016  
Hokkaido International Foundation Language and Homestay Program Summer 2016

## PAPERS

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- **Tegan Wilson**, Daniel Amir, Nitika Saran, Robert Kleinberg, Vishal Shrivastav, Hakim Weatherspoon. *Breaking the VLB Barrier for Oblivious Reconfigurable Networks*. To appear at ACM Symposium on Theory of Computing (STOC) 2024. (arXiv preprint)
- Daniel Amir, **Tegan Wilson**, Vishal Shrivastav, Robert Kleinberg, Hakim Weatherspoon. *Scalability and Congestion Control in Oblivious Reconfigurable Networks*. ACM Special Interest Group on Data Communication (SIGCOMM) 2023 Accepted Poster.
- **Tegan Wilson**, Daniel Amir, Vishal Shrivastav, Hakim Weatherspoon, Robert Kleinberg. *Extending Optimal Oblivious Reconfigurable Networks to all  $N$* . Algorithmic Principles of Computer Systems (APOCS) 2023.
- Daniel Amir, **Tegan Wilson**, Vishal Shrivastav, Hakim Weatherspoon, Robert Kleinberg, Rachit Agarwal. *Optimal Oblivious Reconfigurable Networks*. ACM Symposium on Theory of Computing (STOC) 2022. (full version) (video)
- Jeremy D. Wendt, Richard V. Field, Jr., Cynthia A. Phillips, Arvind Prasad, **Tegan Wilson**, Sucheta Soundarajan Sanjukta Bhowmick. *Partitioning Communication Streams into Graph Snapshots*. IEEE Transactions on Network Science and Engineering, March-April 2023.
- Violet Brown, Xi Chen, Maryam Hedayati, Camden Sikes, Julia Strand, **Tegan Wilson**, David Liben-Nowell. (2019) *Node Ordering for Rescalable Network Summarization (or, the Apparent Magic of Word Frequency and Age of Acquisition in the Lexicon)*. In: Aiello L., Cherifi C., Cherifi H., Lambiotte R., Lió P., Rocha L. (eds) Complex Networks and Their Applications VII. COMPLEX NETWORKS 2018. Studies in Computational Intelligence, vol 812. Springer, Cham

## INVITED TALKS

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- "Breaking the VLB Barrier for Oblivious Reconfigurable Networks." Cornell Theory Seminar, Jan 2024
- Invited speaker at Northwestern and TTIC Junior Theorists Workshop, Fall 2023
- "Optimal Oblivious Reconfigurable Networks."
  - Rutgers DiMACS Theory Seminar, February 2023.
  - Columbia University Theory Seminar, October 2022.
  - Cornell Theory Seminar, May 2022. (video)
- "Using Exchangeable Pairs for Matrix Inequalities." Cornell Theory Tea, Spring 2022 (slides)
- "An Introduction to Graph Coloring Problems." Women and Mathematics Ambassador Program, March 2019

## INTERNSHIPS AND WORK EXPERIENCE

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- Sandia National Laboratory Graduate Research Intern May 2019 - Aug 2019
- NREIP Intern at the Naval Research Laboratory June 2017 - Aug 2017
- Math Assistant Systems Administrator, Carleton College Dec 2015 - June 2018

## TEACHING

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- **At Cornell**
  - TA for CS4830: Introduction to Cryptography Fall 2022
  - Head TA for CS4820: Introduction to Analysis of Algorithms Fall 2018, Fall 2021, Spring 2022
  - TA Award for Spring 2022
- **At Carleton**
  - Course grader for selected math courses: 211, 236, 321, 331, and 332 2016 - 2018
  - Girls Who Code Volunteer Teacher in Northfield, MN 2016 - 2017
- **Other**
  - Cornell Swing Dance TA (PE 1170, 1171) Spring 2020, Fall 2021
  - Cornell West Coast Swing Dance Network Instructor Fall 2019 - Spring 2022

## LEADERSHIP

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- Cornell Graduate Students for Gender Inclusion in Computing (GSGIC)
  - Treasurer 2019 - 2021, Co-President 2021-2022, President 2022 - 2023
- STOCial Program Student Lunch Organizer 2022
- Carleton College Lovelace Board Member 2016 - 2018

## MENTORING

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- Cornell CS Student Applicant Support Program Reviewer 2020-2023
- Carleton College CS Tea on Graduate School – Panelist Sept 2022
- Women in Computing at Cornell (WICC) Mentor Fall 2021
- Cornell CS First Year PhD Mentor 2019 - 2021
- Lovelace/SWiMS (Society for Women in Math and Stats) Student Mentor 2017 - 2018