

# Connor Wagaman

<https://cwagaman.com> | [wagaman@bu.edu](mailto:wagaman@bu.edu)

## EDUCATION

<b>Boston University</b>	Boston, MA
<ul style="list-style-type: none"><li>• <i>Ph.D. student in Computer Science</i></li><li>• Advised by professors Marco Gaboardi and Adam Smith. Interested in data privacy (e.g., differential privacy).</li></ul>	Started Sep. 2022
<b>Harvard University</b>	Cambridge, MA
<ul style="list-style-type: none"><li>• <i>S.M. in Computer Science (advanced standing)</i></li><li>• <i>A.B. in Computer Science (cum laude in field; highest honors in Computer Science)</i></li><li>• <i>Thesis: Finite-Precision Arithmetic Isn't Real: The Impact of Finite Data Types on Efforts to Fulfill Differential Privacy on Computers. Advised by Professor Salil Vadhan.</i></li></ul>	Sep. 2018 – May 2022 Sep. 2018 – May 2022
<b>Concord High School</b>	Wilmington, DE Aug. 2014 – June 2018

## RESEARCH

<b>Boston University – Differential Privacy (DP)</b>	Boston, MA
<i>PhD Student – Professors Adam Smith and Marco Gaboardi</i>	Sep. 2022 – present
<b>Harvard University – Differential Privacy (DP)</b>	Cambridge, MA
<i>Undergraduate Researcher – Professor Salil Vadhan</i>	Feb. 2021 – Aug. 2022
<b>University of Vermont – Secure Multiparty Computation (MPC)</b>	Remote work
<i>NSF REU – Professors Joseph Near and Christian Skalka</i>	May – Aug. 2020

## TEACHING

<b>Boston University CS 330: Introduction to Analysis of Algorithms</b>	Boston, MA
<i>Teaching Fellow – write problem sets, teach discussion sections, hold office hours</i>	Sep. – Dec. 2023
<b>Harvard CS 208: Applied Privacy for Data Science</b>	Cambridge, MA
<i>Teaching Fellow – assisted with problem set design, graded problem sets, held office hours</i>	Jan. – May 2022
<b>Harvard CS 20: Discrete Mathematics for Computer Science</b>	Cambridge, MA
<i>Teaching Fellow – provided some in-class instruction, graded problem sets, held office hours</i>	Jan. 2020 – May 2021
<b>Harvard CS 50: Introduction to Computer Science</b>	Cambridge, MA
<i>Course Assistant – led office hours and tutorials to support the 800-plus students in the course</i>	Aug. – Dec. 2019
<b>AmeriCorps Member</b>	Wilmington, DE
<i>Summer Learning Collaborative (SLC) Reading Corps</i>	May – Aug. 2018

## PAPERS (authors alphabetical)

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### Conferences

- *Widespread Underestimation of Sensitivity in Differentially Private Libraries and How to Fix It*.  
Sílvia Casacuberta, Michael Shoemate, Salil Vadhan, Connor Wagaman.  
ACM CCS '22. Preliminary version at the TPD 2022 workshop ([spotlight talk](#)). [[CCS](#)] [[arXiv](#)]

### Workshops

- *Time-Aware Projections: Truly Node-Private Graph Statistics under Continual Observation*.  
Palak Jain, Adam Smith, Connor Wagaman.  
Preliminary version at the TPD 2023 workshop (poster). In submission.
- *Augmenting Fairness with Welfare: A Framework for Algorithmic Justice*.  
Sílvia Casacuberta, Isaac Robinson, Connor Wagaman.  
Preliminary version at the 2023 European Workshop on Algorithmic Fairness (in-depth talk).

### Senior Thesis

- *Finite-Precision Arithmetic Isn't Real: The Impact of Finite Data Types on Efforts to Fulfill Differential Privacy on Computers*.  
Connor Wagaman.  
Senior thesis, Harvard University (highest honors). Advised by Professor Salil Vadhan.

## TALKS and PRESENTATIONS

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- *Time-Aware Projections: Truly Node-Private Graph Statistics under Continual Observation*
  - Northeastern University Theory Seminar, March 2024
  - Boston University Algorithms and Theory Seminar, March 2024
  - Boston-Area Retreat for the Collaborative Agreement with the US Census Bureau, September 2023
- *Augmenting Fairness with Welfare: A Framework for Algorithmic Justice*
  - Harvard Bridging Privacy Working Group, August 2023 (joint with Sílvia Casacuberta, Isaac Robinson)
- *Widespread Underestimation of Sensitivity in Differentially Private Libraries and How to Fix It*
  - Northeastern University NDS2 Seminar, April 2023 (joint with Sílvia Casacuberta)
  - Boston University Security Seminar, December 2022
  - ACM CCS '22, November 2022 (joint with Sílvia Casacuberta)
  - TPD 2022 workshop at ICML 2022, July 2022 ([spotlight talk](#))
  - Harvard Privacy Tools DP Seminar, May 2022 (joint with Sílvia Casacuberta)

## SERVICE

### Boston-Area Differential Privacy Reading Group

Organizer

Boston, MA  
Aug. 2023 – present

### Boston University Algorithms and Theory Seminar

Student Co-organizer

Boston, MA  
Jan. 2023 – present

## AWARDS

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- Boston University Hariri Institute Graduate Student Fellow. July 2023 – present
- Boston University Chair's Fellowship. August 2022
- Google Bug Hunters Honorable Mention, for results in "Widespread Underestimation of Sensitivity in Differentially Private Libraries and How to Fix It". July 2022