R. TEAL WITTER

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EDUCATION

NYU Tandon — *September 2020 - Present*
PhD in Computer Science — Dean's PhD Fellowship

Middlebury College — *February 2017 - May 2020*
BA in Mathematics — Summa Cum Laude
BA in Computer Science — Phi Beta Kappa

NATIONAL AWARDS

NSF Graduate Research Fellow	2022
Fulbright Scholar (I declined due to COVID)	2020
Goldwater Scholar	2019
Academic All-American (National Speech and Debate Association)	2015

PEER-REVIEWED CONFERENCE PROCEEDINGS

Christopher Musco, Indu Ramesh, Johan Ugander, R. Teal Witter. How to Quantify Polarization in Models of Opinion Dynamics. *17th International Workshop on Mining and Learning with Graphs (MLG 2022).*

R. Teal Witter. Backgammon is Hard. *15th International Conference on Combinatorial Optimization and Applications (COCOA 2021).*

Shelby Kimmel, R. Teal Witter. A Query-Efficient Quantum Algorithm for Maximum Matching on General Graphs. *17th Algorithms and Data Structures Symposium (WADS 2021).*

R. Teal Witter, Alex Lyford.* Applications of Graph Theory and Probability in the Board Game *Ticket to Ride*. *15th International Conference on the Foundations of Digital Games (FDG 2020).*

Kai DeLorenzo, Shelby Kimmel, R. Teal Witter. Applications of the Quantum Algorithm for *st*-Connectivity. *14th Conference on the Theory of Quantum Computation, Communication and Cryptography (TQC 2019).*

Note: As is the tradition in theoretical computer science, authors are ordered alphabetically by last name unless otherwise noted with an asterisk.

TEACHING

I served as a course assistant (responsible for weekly office hours, grading homework, and giving a few lectures) for the following NYU Tandon classes:

CS-GY 6763: Algorithmic Machine Learning and Data Science	Fall 2021, Spring 2022
CS-GY 6923: Machine Learning	Spring 2021

I held weekly office hours for the following Middlebury classes:

MATH 345: Combinatorics	Spring 2020
MATH 310: Probability	Fall 2019
MATH 223: Multivariable Calculus	Spring 2019
MATH 200: Linear Algebra	Fall 2018

CSCI 302: Algorithms and Complexity — Spring 2020
CSCI 333: Quantum Computing — Fall 2019
CSCI 201: Data Structures — Spring 2019
CSCI 200: Math Foundations of Computing — Spring, Fall 2018

TALKS

A Local Search Algorithm for the Min-Sum Submodular Cover Problem

International Symposium on Artificial Intelligence and Mathematics — January 2022

Backgammon is Hard

International Conference on Combinatorial Optimization and Applications — December 2021

A Query-Efficient Quantum Algorithm for Maximum Matching on General Graphs

Algorithms and Data Structures Symposium — August 2021

Applications of Graph Theory and Probability in the Board Game *Ticket to Ride*

International Conference on the Foundations of Digital Games — September 2020

MAA Contributed Paper Session at the Joint Mathematics Meetings — January 2020

Applications of the Quantum Algorithm for *st*-Connectivity

Conference on the Theory of Quantum Computation, Communication and Cryptography — June 2019

SERVICE

I have reviewed papers for the following conferences: QIP 2022, ICALP 2022, TQC 2022.

I run a weekly coding session at Brooklyn International High School. — Spring 2021 - Present