# R. TEAL WITTER

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#### **EDUCATION**

NYU Tandon
PhD in Computer Science

Middlebury College
BA in Mathematics
BA in Computer Science

September 2020 - Present
Dean's PhD Fellowship

February 2017 - May 2020
Summa Cum Laude
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

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

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).

#### **TEACHING**

#### Algorithmic Machine Learning and Data Science (NYU CS-GY 6763)

Course Assistant Fall 2021, Spring 2022

## Machine Learning (NYU CS-GY 6923)

Course Assistant Spring 2021

#### **TALKS**

### How to Quantify Polarization in Models of Opinion Dynamics

International Workshop on Mining and Learning with Graphs

August 2022

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