

# R. TEAL WITTER

[rtealwitter@gmail.com](mailto:rtealwitter@gmail.com) / [www.rtealwitter.com](http://www.rtealwitter.com)

## EDUCATION

---

**NYU Tandon**

Ph.D. in Computer Science

*September 2020 - Present*

**Middlebury College**

B.A. in Computer Science

B.A. in Mathematics

*February 2017 - May 2020*

**Phi Beta Kappa**

## RESEARCH INTERESTS

---

Algorithm, query models, convex optimization, graph theory, probability, stochastic processes, quantum algorithms

## NATIONAL AWARDS

---

**Fulbright Scholar** (prevented by COVID)

2020

**Goldwater Scholar**

2019

**Academic All-American** (National Speech and Debate Association)

2016

## PEER-REVIEWED CONFERENCE PROCEEDINGS

---

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

Kai DeLorenzo, Shelby Kimmel, R. Teal Witter. (2019). **Applications of the Quantum Algorithm for *st*-Connectivity**. *14th Conference on the Theory of Quantum Computation, Communication and Cryptography*, vol 135, pp 6:1-14.

## TALKS

---

**Applications of Graph Theory and Probability in the Board Game *Ticket to Ride***. *MAA Contributed Paper Session at the Joint Mathematics Meetings*, January 16, 2020, Denver, CO.

**Applications of the Quantum Algorithm for *st*-Connectivity**. *Conference on the Theory of Quantum Computation, Communication and Cryptography*, June 3, 2019, College Park, MD.

## SELECTED TECHNICAL WORK

---

**Quantum Query Optimizer**

Fall 2019

**On the Cover Times of Random Walks**

Spring 2019

## TEACHING

---

For each class, I tutored weekly two-hour drop-in sessions.

Algorithms & Complexity

Spring 2020

Combinatorics

Spring 2020

Quantum Computing

Fall 2019

Probability	Fall 2019
Data Structures	Spring 2019
Calculus (I, II, and III)	Spring 2019
Linear Algebra	Fall 2018
Math Foundations	Spring, Fall 2018

## SERVICE

---

I received the [2018-19 Outstanding Leader of a Student Organization](#) award for my campus leadership.

President, Treasurer of Middle Endian Computer Science	6 Semesters
Co-Chair of the Math Student Advisory Council	6 Semesters
Treasurer of the Debate Society	3 Semesters
Treasurer of Hillel	2 Semesters