

UTHSAV CHITRA

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Website: <https://uthsavc.github.io>

EDUCATION

Princeton University, Princeton, New Jersey
Ph.D. Candidate in Computer Science

September 2018 - Present

Brown University, Providence, Rhode Island
Sc.B. Mathematics, A.B. Computer Science, A.B. Applied Math

Sept 2013 - May 2017
GPA: 4.0/4.0

PUBLICATIONS

NetMix: A network-structured mixture model for reduced-bias estimation of altered subnetworks. Matthew A Reyna*, Uthsav Chitra*, Rebecca Elyanow, Benjamin J Raphael. *International Conference on Research in Computational Molecular Biology (RECOMB) 2020.*
<https://www.biorxiv.org/content/10.1101/2020.01.18.911438v1>

Analyzing the Impact of Filter Bubbles on Social Network Polarization. Uthsav Chitra*, Christopher Musco*. *ACM International Web Search and Data Mining Conference (WSDM) 2020.*
<https://arxiv.org/abs/1906.08772>

Random Walks on Hypergraphs with Edge-Dependent Vertex Weights. Uthsav Chitra, Benjamin J Raphael. *International Conference on Machine Learning (ICML) 2019.*
<http://proceedings.mlr.press/v97/chitra19a.html>

Committee Selection is More Similar Than You Think: Evidence from Avalanche and Stellar. Tarun Chitra, Uthsav Chitra. *Manuscript, 2019.* <https://arxiv.org/abs/1904.09839>

(* denotes equal contribution or alphabetical order)

HONORS AND AWARDS

NSF Graduate Research Fellowship Recipient *2020-2023*

Jerome Stein Memorial Award, Brown University Applied Math Department *2017*
• Given to two students each year who "show outstanding potential in an interdisciplinary area that involves applied mathematics."

Phi Beta Kappa, Brown University *Spring 2016*

Top 200, William Lowell Putnam Math Competition *2015*

TEACHING EXPERIENCE

Instructor, Princeton Prison Teaching Initiative *2019-Present*
• Teaching algebra at a New Jersey state prison as a part of the NJ-STEP program, an accredited higher education program which helps inmates receive associate's degrees.

Teaching Assistant/Grader, Brown University

• MATH 1560: Number Theory	<i>Spring 2016, Spring 2017</i>
• CSCI 1570: Design and Analysis of Algorithms	<i>Fall 2015, Fall 2016</i>
• CSCI 1450: Probability in Computing	<i>Spring 2015</i>
• CSCI 0530: Linear Algebra for CS	<i>Fall 2014</i>
• MATH 1530: Abstract Algebra	<i>Spring 2014</i>

Counselor, Program in Mathematics for Young Scientists (PROMYS)

Summer 2014

- Counselor for summer program that introduces high school students to higher math through elementary number theory.

TALKS

Analyzing the Impact of Filter Bubbles on Social Network Polarization

- ACM International Web Search and Data Mining Conference (WSDM)
- KDD Workshop on Issues of Sentiment Discovery and Opinion Mining

February 2020

August 2019

Random Walks on Hypergraphs with Edge-Dependent Vertex Weights

- International Conference of Machine Learning (ICML)

June 2019

WORK EXPERIENCE

Software Engineer, Facebook

August 2017 - September 2018

- Developed models and infrastructure for news feed ads.

Software Engineering Intern, Facebook

Summer 2016

- Worked on various projects on the Video Ads team.

Hobbies/interests: **Bouldering**, biking, political betting markets, bad puns.