

# Jesse Goodman

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## Education

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**Cornell University** 2018 - 2023

Ph.D., Computer Science

Advisor: Eshan Chattopadhyay

Research Interests: Combinatorics, Complexity Theory, Cryptography, Pseudorandomness

**Princeton University** 2013 - 2017

B.S.E., *summa cum laude*, Computer Science

Certificate, Applied and Computational Mathematics

## Publications

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**Low-degree polynomials extract from local sources**

Omar Alrabiah, Eshan Chattopadhyay, Jesse Goodman, Xin Li, João Ribeiro

[ICALP 2022](#)

**The space complexity of sampling**

Eshan Chattopadhyay, Jesse Goodman, David Zuckerman

[ITCS 2022](#)

**Affine extractors for almost logarithmic entropy**

Eshan Chattopadhyay, Jesse Goodman, Jyun-Jie Liao

[FOCS 2021](#)

**Improved extractors for small-space sources**

Eshan Chattopadhyay, Jesse Goodman

[FOCS 2021](#)

**Extractors and secret sharing against bounded collusion protocols**

Eshan Chattopadhyay, Jesse Goodman, Vipul Goyal, Ashutosh Kumar,

Xin Li, Raghu Meka, David Zuckerman

[FOCS 2020](#)

**Extractors for adversarial sources via extremal hypergraphs**

Eshan Chattopadhyay, Jesse Goodman, Vipul Goyal, Xin Li

[STOC 2020](#)

**On the approximability of Time Disjoint Walks**

Alexandre Bayen, Jesse Goodman, Eugene Vinitsky

## Talks

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<b>Low-degree polynomials extract from local sources</b> ICALP 2022	July 2022
<b>The space complexity of sampling</b> ITCS 2022	February 2022
<b>Improved extractors for small-space sources</b> FOCS 2021	February 2022
<b>Extractors and secret sharing against bounded collusion protocols</b> FOCS 2020 (with Ashutosh Kumar) Theory Seminar, <i>Cornell University</i>	November 2020 November 2020
<b>Extractors for adversarial sources via extremal hypergraphs</b> STOC 2020 ACO Seminar, <i>Carnegie Mellon University</i>	June 2020 May 2020
<b>On the approximability of Time Disjoint Walks</b> COCOA 2018	December 2018

## Experience

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<b>NTT Research</b> , <i>Sunnyvale, CA</i> Research Intern, CIS Lab. Host: Vipul Goyal	Summer 2022
<b>Carnegie Mellon University</b> , <i>Pittsburgh, PA</i> Visiting Scholar, Computer Science Department. Host: Vipul Goyal	Summer 2019
<b>Google</b> , <i>New York, NY</i> Software Engineering Intern, Google Research / Google Search	Summer 2018
<b>UC Berkeley</b> , <i>Berkeley, CA</i> Researcher, EECS Department. Host: Alexandre Bayen	September 2017 - May 2018
<b>Google</b> , <i>Sunnyvale, CA</i> Software Engineering Intern, Google Cloud	Summer 2017
<b>Google</b> , <i>Mountain View, CA</i> Software Engineering Intern, Network Architecture	Summer 2016

## Teaching

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<b>CS 4820:</b> Introduction to Analysis of Algorithms (Head TA, Cornell)	Spring 2019
<b>CS 4820:</b> Introduction to Analysis of Algorithms (Head TA, Cornell)	Fall 2018
<b>MAT 375:</b> Introduction to Graph Theory (TA, Princeton)	Spring 2017

## Service and Outreach

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<b>Reviewer:</b> STOC, FOCS, CCC, ITCS, CRYPTO, RANDOM, ISIT, ITC, ITW	
<b>Member:</b> <i>CS PhD Admissions Committee</i> , Cornell University	2022
<b>Volunteer:</b> <i>URM Applicant Support Program</i> , Cornell University	2022
<b>Co-organizer:</b> <i>Theory Tea</i> , Cornell University	2019-2022
<b>Chair on committee:</b> <i>Expand Your Horizons (EYH)</i> , Cornell University	2020
<b>Volunteer:</b> <i>Girls' Adventures in Math (GAIM)</i> , Cornell University	Spring 2019
<b>Instructor:</b> <i>Splash at Berkeley</i> , UC Berkeley	Spring 2018
<b>Instructor:</b> <i>Splash at Princeton</i> , Princeton University	Spring 2017
<b>Creator:</b> <i>Instructacus</i> (in use by elementary school students across NY)	2014-