

# Eshan Chattopadhyay

## Contact

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## Research Interest

Theoretical Computer Science, Computational Complexity Theory, and Combinatorics.

## Personal Information

Born: September 23, 1989  
Citizenship: Indian

## Appointments

2017 Fall - Present	Postdoctoral Researcher at Institute for Advanced Study, Princeton
2017 Summer	Postdoctoral Researcher at Microsoft Research, India
2017 Spring	Microsoft Research Fellow at the Simons Institute, UC Berkeley
2016 Fall	Postdoctoral Researcher at Institute for Advanced Study, Princeton
2015 Summer, 2016 Summer	Research Intern at Microsoft Research, India
2011-2016	Teaching Assistant and Research Assistant at University of Texas, Austin
2010 Summer	Research Intern at ETH Zurich, Switzerland

## Education

August, 2011-May, 2016	Ph.D. in Computer Science, University of Texas, Austin. Advisor: Prof. David Zuckerman. Thesis: Explicit Two-Source Extractors and More.
June, 2007-June, 2011	B.Tech in Computer Science, Indian Institute of Technology, Kanpur

## Honors/Awards

Bert Kay Dissertation Award 2016, given for the best doctoral thesis in computer science at UT Austin.

Best Paper Award in STOC 2016.

Dissertation Writing Fellowship awarded by University of Texas at Austin Graduate School for Spring 2016.

US Junior Oberwolfach Fellow, 2015

MCD Fellowship 2011-14 awarded by University of Texas at Austin.

General Proficiency Medal for Best Academic Performance in B. Tech in Computer Science 2007-11, IIT Kanpur.

Best Bachelor's Thesis Award in Computer Science, IIT Kanpur for the year 2011. (thesis title: Pseudorandom generators for polynomials, advised by Prof. Manindra Agrawal.)

All India Rank 101 in Joint Entrance Exam conducted by Indian Institute of Technology in 2007.

## Publications/Manuscripts

*A Reduction from Efficient Non-malleable Extractors to Low-error Two-source Extractors with Arbitrary Constant Rate*

Avraham Ben-Aroya, Eshan Chattopadhyay, Dean Doron, Xin Li, Amnon Ta-Shma  
Manuscript 2017.

*Non-Malleable Codes and Extractors for Small-Depth Circuits, and Affine Functions*

Eshan Chattopadhyay, Xin Li  
STOC 2017.

*Explicit Non-Malleable Extractors, Multi-Source Extractors and Almost Optimal Privacy Amplification Protocols*

Eshan Chattopadhyay, Xin Li  
FOCS 2016.

*Explicit Two-Source Extractors and Resilient Functions*

Eshan Chattopadhyay, David Zuckerman  
STOC 2016 (Best Paper Award).

*Extractors for Sumset Sources*

Eshan Chattopadhyay, Xin Li  
STOC 2016.

*Non-Malleable Extractors and Codes, with their Many Tampered Versions*

Eshan Chattopadhyay, Vipul Goyal, Xin Li  
STOC 2016.

*New Extractors for Interleaved Sources*

Eshan Chattopadhyay, David Zuckerman  
CCC 2016.

*Non-Malleable Codes against Constant-Split State Tampering*

Eshan Chattopadhyay, David Zuckerman  
FOCS 2014.

*On Low Discrepancy Samplings in Product Spaces of Motion Groups*

Chandrajit Bajaj, Abhishek Bhowmick, Eshan Chattopadhyay, David Zuckerman  
Manuscript, 2014.

*An Explicit VC-Theorem for Low-Degree Polynomials*

Eshan Chattopadhyay, Adam Klivans, Pravesh Kothari  
RANDOM 2012.

## Invited Talks

*Microsoft Research, Bangalore*

Bangalore, India  
Theory Seminar

July 2017

*Northeastern University*

Boston, MA  
Pseudorandomness Workshop

April 2017

*Cornell University*

Ithaca, NY  
Computer Science Seminar

March 2017

*University of Chicago*

Chicago, IL  
Computer Science Seminar

February 2017

*Simons Institute for the Theory of Computing*

Berkeley, CA  
Pseudorandomness Workshop

February 2017

*Institute for Advanced Study*

Princeton, NJ  
Computer Science & Discrete Math Seminar II

November 2016

*New York University*

New York, NY

November 2016

Theory Seminar

*Institute for Advanced Study*

Princeton, NJ

October 2016

Mathematical Conversations

*Banff International Research Station*

Banff, Alberta, Canada

September 2016

Workshop on Computational Complexity, 2016

*The Chinese University of Hong Kong*

Hong Kong

August 2016

China Theory Week, 2016

*Indian Institute of Science*

Bangalore, India

August 2016

Theory Seminar

*Infosys, Mysore*

Mysore, India

August 2016

Mysore Park Workshop

*Microsoft Research, Bangalore*

Bangalore, India

August 2016

Theory Seminar

*Microsoft Research, Bangalore*

Bangalore, India

August 2016

Lab Seminar

*University of California, Los Angeles*

Los Angeles, CA

May 2016

Theory Seminar

*Cornell University*

Ithaca, NY

May 2016

Theory Seminar

*Microsoft Research, New England*

New England, MA  
Theory Seminar

January 2016

*Oberwolfach*

Wolfach, Germany  
Complexity Theory Workshop, specialized session

November 2015

*Stellenbosch Institute for Advanced Study*

Stellenbosch, South Africa  
Workshop on Foundations of Randomness

October 2015

*Massachusetts Institute of Technology*

Boston, MA  
Charles River Crypto Day

October 2015

*New York University*

New York, NY  
Theory Seminar

September 2015

*Institute for Advanced Study*

Princeton, NJ  
Computer Science & Discrete Math Seminar II

September 2015

*Institute for Advanced Study*

Princeton, NJ  
Computer Science & Discrete Math Seminar I

September 2015

*Microsoft Research, Bangalore*

Bangalore, India  
Theory Seminar

June 2015