

GAUTAM CHETAN KAMATH

ADDRESS

32 Vassar Street
Room 32-G628
Cambridge, MA 02139

CONTACT

Website: www.gautamkamath.com
Cell: (657) 206-7724
Email: g@csail.mit.edu
Skype ID: hoonose.me

EDUCATION

Massachusetts Institute of Technology, Cambridge, MA

September 2012 - Present

Doctor of Philosophy Candidate

Electrical Engineering and Computer Science, focus in Theoretical Computer Science

Advised by Professor Constantinos Daskalakis

S.M. Thesis: On Learning and Covering Structured Distributions.

Cornell University, Ithaca, NY

August 2008 - May 2012

Bachelor of Science, summa cum laude

Computer Science, Electrical and Computer Engineering

TEACHING EXPERIENCE

Teaching Assistant	Massachusetts Institute of Technology	Spring 2015, 2017
6.853: Algorithmic Game Theory and Data Science		(1 semester)
6.856: Randomized Algorithms		(1 semester)
Teaching Assistant	Cornell University	Spring 2010 - Spring 2012
CS 1114: Intro to Computing with Matlab and Robotics		(2 semesters)
CS 2850: Networks		(1 semester)
CS 3110: Data Structures and Functional Programming		(5 semesters)
CS 4820: Introduction to Algorithms		(3 semesters)

PUBLICATIONS

Being Robust (in High Dimensions) Can Be Practical

Ilias Diakonikolas, Gautam Kamath, Daniel M. Kane, Jerry Li, Ankur Moitra, Alistair Stewart
In submission

Priv'IT: Private and Sample Efficient Identity Testing

Bryan Cai, Constantinos Daskalakis, Gautam Kamath
In submission

Efficient and Optimally Robust Learning of High-Dimensional Gaussians

Ilias Diakonikolas, Gautam Kamath, Daniel M. Kane, Jerry Li, Ankur Moitra, Alistair Stewart
Manuscript

Testing Ising Models

Constantinos Daskalakis, Nishanth Dikkala, Gautam Kamath
Manuscript

Robust Estimators in High Dimensions without the Computational Intractability

Ilias Diakonikolas, Gautam Kamath, Daniel M. Kane, Jerry Li, Ankur Moitra, Alistair Stewart
Proceedings of the 57th Annual IEEE Symposium on Foundations of Computer Science (FOCS 2016)

Invited to the SIAM Journal on Computing Special Issue for FOCS 2016

Invited to Highlights of Algorithms 2017 (HALG 2017)

A Size-Free CLT for Poisson Multinomials and its Applications

Constantinos Daskalakis, Anindya De, Gautam Kamath, Christos Tzamos
Proceedings of the 48th ACM Symposium on Theory of Computing (STOC 2016)

Optimal Testing for Properties of Distributions

Jayadev Acharya, Constantinos Daskalakis, Gautam Kamath
Advances in Neural Information Processing Systems 28 (NIPS 2015)
Selected for a Spotlight Presentation (4.5% acceptance rate)

On the Structure, Covering, and Learning of Poisson Multinomial Distributions

Constantinos Daskalakis, Gautam Kamath, Christos Tzamos
Proceedings of the 56th Annual IEEE Symposium on Foundations of Computer Science (FOCS 2015)

A Chasm Between Identity and Equivalence Testing with Conditional Queries

Jayadev Acharya, Clément Canonne, Gautam Kamath
Proceedings of the 19th International Workshop on Randomization and Computation (RANDOM 2015)

Adaptive Estimation in Weighted Group Testing

Jayadev Acharya, Clément Canonne, Gautam Kamath
Proceedings of the 2015 IEEE International Symposium on Information Theory (ISIT 2015)

On Learning and Covering Structured Distributions

Gautam Kamath
S.M. Thesis, 2014
Available at www.gautamkamath.com/thesis.pdf

Faster and Sample Near-Optimal Algorithms for Proper Learning Mixtures of Gaussians

Constantinos Daskalakis, Gautam Kamath
Proceedings of the 27th Annual Conference on Learning Theory (COLT 2014)

An Analysis of One-Dimensional Schelling Segregation

Christina Brandt, Nicole Immorlica, Gautam Kamath, Robert Kleinberg
Proceedings of the 44th ACM Symposium on Theory of Computing (STOC 2012)

TALKS

A Size-Free CLT for Poisson Multinomials and its Applications

Symposium on Theory of Computing, June 2016

Robust Estimators in High Dimensions without the Computational Intractability

China Theory Week, August 2016 (**Invited**)

Optimal Testing for Properties of Distributions

Northeastern Theory Seminar, March 2017 (**Invited**)
University of Pennsylvania Theory Lunch, September 2016 (**Invited**)
MIT Signals, Information, and Algorithms Laboratory Group Meeting, March 2016 (**Invited**)
University of Massachusetts Boston, February 2016 (**Invited**)
Berkeley Theory Lunch, September 2015

A Chasm Between Identity and Equivalence Testing with Conditional Queries

MIT Theory Lunch, February 2015

Faster and Sample Near-Optimal Algorithms for Proper Learning Mixtures of Gaussians

Conference on Learning Theory, June 2014
MIT Theory Lunch, May 2014

An Analysis of One-Dimensional Schelling Segregation

Interdisciplinary Workshop on Information and Decision in Social Networks, November 2012
Symposium on Theory of Computing, May 2012 (**Winner of Best Student Presentation Award**)

HONORS AND AWARDS

MIT Akamai Presidential Graduate Fellowship	September 2012 - May 2013
Symposium on Theory of Computing Best Student Presentation Award	May 2012
Cornell Computer Science Prize for Academic Excellence	May 2012
Eight time Dean's list at Cornell University	Fall 2008 - Spring 2012
Recognized by Cornell CS for outstanding work as TA for CS 3110 and CS 4820	Spring 2012
John G. Pertsch Jr. Prize for second highest GPA in ECE	Spring 2011
Second Place in Cornell Facebook Hackathon (http://tinyurl.com/plannit)	Spring 2011
Featured on Hackaday for ECE 4760 Project (http://tinyurl.com/gckvocal)	Spring 2011
Attended the Experience Theory Project at University of Washington	Summer 2010
Recognized by Cornell CS for outstanding work as TA for CS 1114	Spring 2010
Fourth place in Cornell CS 3110 SteamKart Bot AI Tournament	Fall 2009
Canadian Open Mathematics Challenge Gold Medalist in Central Ontario Region	Spring 2007

SERVICE

Editor of Property Testing Review
Editor and contributor to MIT Theory of Computation Student Blog
Co-organizer for the TCS+ online seminar series in Theoretical Computer Science
Co-organizer of FOCS 2016 Workshop on Orthogonal Polynomials and Applications (October 2016)
Organizer of the Second Annual Sublinear Algorithms and Big Data Day (April 2015)
Organizer of Second Annual Danny Lewin MIT Theory Student Retreat (October 2013)
Organizer of MIT Theory Lunch (Fall 2012 - Summer 2013)
External reviewer for:
STOC 2014, COLT 2014, FOCS 2014, SODA 2015, ITCS 2015, Foundations and Trends in Theoretical Computer Science, STOC 2015, COLT 2015, RANDOM 2015, FOCS 2015, STACS 2016, FOCS 2016, NIPS 2016, ITCS 2017, SODA 2017, STOC 2017, COLT 2017, ICALP 2017, Theory of Computing Systems

REFERENCES

Available upon request