

Candidate for Chair

Omer Reingold
Stanford University, Stanford, CA, USA

BIOGRAPHY

Academic Background:

Ph.D., Weizmann Institute, 1998, Computer Science.

Professional Experience:

Professor, Stanford University, Stanford, CA, 2016 – Present;
Principal Research Engineer, Samsung Research America, Mountain View, CA, 2015 – 2016;
Principal Researcher, Microsoft Research, Mountain View, CA, 2009 – 2014.

Professional Interest:

Foundation of Computer Science; Complexity Theory; Cryptography; Fairness; Privacy.

ACM Activities:

Member, SIGACT, 2007 – Present.

Awards:

Godel Prize, 2009;
ACM Grace Murray Hopper Award, 2005.

STATEMENT

I am honored to be nominated to be Chair of SIGACT. I am indebted to the remarkable members of the TOC community, and will be happy to serve it back.

Candidate for Chair

Samir Khuller
University of Maryland, College Park, MD, USA

BIOGRAPHY

Academic Background:

Ph.D., Cornell University, 1990, Computer Science.

Professional Experience:

Professor, University of Maryland, College Park, MD, 1992 – Present;
Elizabeth Iribe Chair, University of Maryland, College Park, MD, 2012 – 2017;
Associate Chair, University of Maryland, College Park, MD, 2004 – 2008.

Professional Interest:

Algorithms; Combinatorial Optimization; Graphs and Networks; Data Management;
Computational Geometry.

ACM Activities:

Columnist, SIGACT News, 1992 – Present;
Program Committee, ACM SPAA Conference, 2017;
Program Committee, ACM-SIAM Conference, 2007;
Program Committee, ACM STOC Conference, 2003.

Membership and Offices in Related Organizations:

ESA Steering Committee, EATCS, 2012 – 2016.

Awards Received:

ESA Test of Time Award (EATCS), 2016;
ACM PODS Best newcomer paper Award, 2003.

STATEMENT

As chair of SIGACT, in addition to the usual activities associated with the position, I would like to focus on three main initiatives with the active engagement and support of SIGACT members. These include:

- (i.) Enhancing diversity of the SIGACT community, especially in terms of gender
- (ii.) Working with other SIG chairs to create greater collaboration across our different communities, through joint workshops

(iii.) Interacting with varied stakeholders to establish a Dagstuhl style workshop center to facilitate such collaborations.

As computing has become increasingly central to virtually every aspect of contemporary life, I strongly believe that it is imperative that the community represented by SIGACT find ways to expand representation, connect with other areas of computer science, engage with other scientific disciplines in a targeted and meaningful way, support students and younger members of our community. I would also like to increase our collaboration with European Association for Theoretical Science.

Having served as the department chair of a major CS department for five years, where I helped develop many initiatives, I am confident that I have the experience and skill set to work on these initiatives. I sincerely hope I have your support in this venture.

Candidate for Member-at-Large

Kunal Talwar
Google Inc., Mountain View, CA, USA

BIOGRAPHY

Academic Background:

Ph.D., University of California, Berkeley, 2004, Computer Science.

Professional Experience:

Research Scientist, Google Inc., Mountain View, CA, 2015 – Present;
Research Scientist, Microsoft Research, Mountain View, CA, 2004 – 2014.

Professional Interest:

Algorithms; Differential Privacy; Machine Learning.

ACM Activities:

ACM STOC Workshops Co-chair, 2014;
ACM STOC Posters Co-chair, 2013;
Member, SIGACT, 2011 – Present.

Membership and Offices in Related Organizations:

Associate Editor, Siam Journal of Computing, 2012 – Present;
Workshop co-organizer "Big Data and Differential Privacy", Simons Institute for TCS, Berkeley, 2013.

Awards Received:

Best Paper Award, ICLR, 2017;
Privacy Enhancing Technologies (PET) Award, 2009.

STATEMENT

It has been my pleasure to be a member of the TCS community for close to two decades. Our community has made immense contributions to the theory and practice of computing. Our work has had a strong impact on society broadly, and I expect a lot more over time. I've been fortunate to see up close, and contribute to one of these: differential privacy was in its infancy when I started at MSR; today it is used in Chrome and in the iPhone, and anyone can download from GitHub code to train a differentially private machine learning model using TensorFlow. Being at industrial labs has given me a useful perspective on the strengths and weaknesses of the academic and various industrial models of research. I think closer collaboration between academia and industrial research would benefit both and I hope to be able to help facilitate that. I also believe, in light of recent reports, that we can and must do more to make every academic community more inclusive, more diverse, and safe and welcoming to all members.

It would be my honor and privilege to serve on the SIGACT board, should I be given the opportunity to do so.

Candidate for Member-at-Large

Aleksander Madry
Massachusetts Institute of Technology, Cambridge, MA, USA

BIOGRAPHY

Academic Background:

Ph.D., Massachusetts Institute of Technology, 2011, Computer Science.

Professional Experience:

Associate Professor of Computer Science, Massachusetts Institute of Technology, Cambridge, MA, 2017 – Present;

Assistant Professor of Computer Science, Massachusetts Institute of Technology, Cambridge, MA, 2015 – 2017;

Assistant Professor of Computer Science, École Polytechnique Fédérale de Lausanne, Switzerland, 2012 – 2015.

Professional Interest:

Algorithmic graph theory; Continuous optimization; Online algorithms; Science of deep learning.

ACM Activities:

Member, SIGACT, 2013 – Present.

Membership and Offices in Related Organizations:

Co-Founder and Steering Committee Member, Highlights of Algorithms Conference (HALG), 2016 – Present;

Steering Committee Member, European Symposium on Algorithms (ESA), 2015 – Present;

Co-Chair, Simons "Bridging Continuous and Discrete Optimization" program, 2017.

Awards Received:

Google Research Award, 2017;

Alfred P. Sloan Research Fellowship, 2016;

NSF CAREER Award, 2015;

ACM Doctoral Dissertation Award Honorable Mention, 2011.

STATEMENT

These are exciting times for theoretical computer science! On one hand, today, TCS is able to connect to and influence a wide range of fields within computer science and beyond it. On the other hand, all these stimulating interactions help us make progress on the outstanding questions in our domain.

Still, these opportunities do not come without challenges: How can we maximize the broader impact of TCS and benefit from it while maintaining proper focus on our core goals? Do we need to rethink how we train our students, organize and structure our conferences, or promote and present our field to the world?

These are questions I deeply care about and, if elected, I would like to support SIGACT in guiding the community-wide dialogue that would be needed to answer them. I believe that my past efforts to both strengthen ties within our field (e.g., by co-founding the Highlights of Algorithms conference and being involved in organization of the STOC 2017 TheoryFest) and the connections to other areas (e.g., by co-chairing the Simons Institute "Bridging Continuous and Discrete Optimization" program) have enabled me to gain experience and perspective that will be useful here.

Candidate for Member-at-Large

Nicole Immorlica
Microsoft Research, New England, Cambridge, MA, USA

BIOGRAPHY

Academic Background:

Ph.D., MIT, 2005, Theoretical Computer Science.

Professional Experience:

Senior Researcher, Microsoft Research, New England, MA, 2012 – Present;
Visiting Lecturer, Harvard University, Cambridge, MA, 2012 – Present;
Assistant Professor, Northwestern University, Evanston, IL, 2008 – 2012.

Professional Interest:

Auctions; Market Design; Social Networks; Behavioral Economics; Machine Learning.

ACM Activities:

Member, SIGACT Committee for the Advancement of TCS (CATSC), 2017 – Present;
Member (chair for 2017), SIGecom Doctoral Dissertation Award Committee, 2016 – Present;
Associate Editor, Transactions on Economics and Computing (TEAC), 2014 – Present.

Membership and Offices in Related Organizations:

(Senior) Program Committee Member, ACM Conference on Economics and Computation (EC), 2015 – Present;
Program Committee Member, ACM Symposium on Discrete Algorithms (SODA), 2017;
Guest Editor, Special Issue of Games and Economic Behavior (GEB), 2013 – 2014.

Awards:

Sloan Fellowship, 2012;
NSF CAREER Award, 2010;
Microsoft New Faculty Fellowship, 2009.

STATEMENT

I am honored to run for member-at-large of ACM SIGACT. I will work hard to make sure the ACM organization understands and responds to the needs of the TCS community. My participation on the Committee for the Advancement of TCS (CATCS) makes me uniquely positioned to contribute in this regard. CATCS brainstorms activities and resources that will advance the TCS community, including highlighting junior job candidates in a centralized database, creating a repository of TCS talks, and improving diversity in TCS by increasing TCS presence at events like Grace Hopper.

One effort I am particularly passionate about is raising awareness of TCS in the general public by pitching great TCS advancements to journalists at mainstream publications. As a SIGACT member-at-large, I will bring these ideas to SIGACT and request the necessary support from ACM to pursue them.

Candidate for Member-at-Large

Amit Sahai
University of California, Los Angeles, CA, USA

BIOGRAPHY

Academic Background:

Ph.D., MIT, 2000, Computer Science.

Professional Experience:

Professor, University of California, Los Angeles (UCLA), CA, 2004 – Present;
Director, Center for Encrypted Functionalities, 2014 – Present;
Assistant Professor, Princeton University, Princeton, NJ, 2000 – 2004.

Professional Interest:

Theory of Computation; Cryptography; Information Theory; Computational Complexity.

ACM Activities:

Program Committee Member, ACM STOC, 2017;
Program Committee Member, ACM STOC, 2006;
Member, SIGACT, 2017 – Present.

Membership and Offices in Related Organizations:

PC Chair, Theory of Cryptography (TCC), 2013;
PC Member: FOCS, CRYPTO, Eurocrypt, ICALP, etc., various.

Awards Received:

ACM Conference on Computer and Communication Security Test of Time Award, 2016;
Lead PI, NSF FRONTIER Award, 2014;
Pazy Memorial Award, 2012;
Google Faculty Award, 2010.

STATEMENT

I would be honored to represent the interests of the theory community on the SIGACT board in the role of Member-at-Large. The theory community is remarkably vibrant, both in terms of the breadth and depth of our contributions to the intellectual fabric of computer science. I look forward to engaging with the many issues facing our community, including renewing and reimagining the role of the flagship STOC conference.

Candidate for Member-at-Large

Eric Allender
Rutgers University, New Brunswick, NJ, USA

BIOGRAPHY

Academic Background:

Ph.D., Georgia Institute of Technology, 1985, Computer Science.

Professional Experience:

Distinguished Professor, Rutgers University, New Brunswick, NJ, 2008 – Present;
Professor, Rutgers University, New Brunswick, NJ, 1997 – 2008;
Associate Professor, Rutgers University, New Brunswick, NJ, 1991 – 1997.

Professional Interest:

Computational Complexity Theory; Kolmogorov Complexity, Circuit Complexity.

ACM Activities:

Editor-in-Chief, ACM Transactions on Computation Theory, 2010 – 2017;
Member, SIGACT, 1996 – Present.

Membership and Offices in Related Organizations:

Treasurer & Board of Trustees, Computational Complexity Foundation, 2014 – 2017.

Awards:

Fellow of the ACM, 2007.

STATEMENT

SIGACT plays an important role in maintaining the health of the research community in theoretical computer science. If elected, I will strive to help SIGACT continue to play this role. I believe that SIGACT has been running smoothly, and I have no agenda for significant change.

Candidate for Member-at-Large

Mohammad T. Hajiaghayi
University of Maryland, College Park, MD, USA

BIOGRAPHY

Academic Background:

Ph.D., Massachusetts Institute of Technology, 2005, Applied Mathematics (Computer Science).

Professional Experience:

Jack and Rita G. Minker Professor, University of Maryland, College Park, MD, 2016 – Present;
Jack and Rita G. Minker Associate Professor, University of Maryland, College Park, MD, 2012 – 2016;
Jack and Rita G. Minker Assistant Professor, University of Maryland, College Park, MD, 2010 – 2012.

Professional Interest:

Algorithms; Game theory; Big data; Network design; Social networks and graphs.

ACM Activities:

Chair, 29th ACM Symposium on Parallelism in Algorithms and Architecture, 2017 – Present;
ACM Member & University of Maryland ACM Faculty Representative, 2010 – Present;
Coach, University of Maryland ACM-ICPC Programming Contest Team, 2010 – Present;
Guest Editor, ACM TALG and ACM TOPC, 2008 – Present.

Membership and Offices in Related Organizations:

IEEE Senior Member & EATCS Member, IEEE & EATCS, 2014 – Present;
Member of Editorial Board, SIDMA, Algorithmica, Networks, Algorithms, 2008 – Present;
PC Member: SODA '08,'17; SPAA '11,'15,'17; INFOCOM '12-'18; ICALP '15; STOC '13; ESA '13, 2008 – Present.

Awards:

ACM International Collegiate Programming Contest (ICPC) Coach Award, 2017;
European Association for TCS (EATCS) Nerode Prize, 2015;
ONR Young Investigator Award, 2011;
NSF CAREER Award and Google Faculty Research Award, 2010.

STATEMENT

It is a privilege to be nominated to serve as SIGACT Member-at-Large. As a member of Theoretical Computer Science (TCS) for almost two decades I published extensively in top TCS conferences, and recently chaired SPAA '17. My experience in both academia and industry (IBM, AT&T, Microsoft, Google) has given me a deep understanding of the diverse cultures of the community. If elected, my priorities will be to:

- 1) Advance SIGACT by integrating new research areas such as BIG data, machine learning, and cryptocurrency to obtain more funding from industry/government while maintaining SIGACT's core values and identity.
- 2) Advocate a Strategic Plan for SIGACT (with consensus from the board) to enhance diversity and inclusiveness among women and other minorities and maintain a strong focus in that direction.
- 3) Work to decrease the costs of SIGACT conferences and expand the student travel awards program.
- 4) Work to integrate fair standards of double-blind reviews and rebuttal phases accepted in almost all communities (except TCS) into SIGACT conferences while maintaining SIGACT's identity, e.g., by allowing posting in arXiv with no restriction.

Candidate for Member-at-Large

Robert Kleinberg
Cornell University, Ithaca, NY, USA

BIOGRAPHY

Academic Background:

Ph.D., MIT, 2005, Mathematics.

Professional Experience:

Associate Professor, Cornell University, Ithaca, NY, 2013 – Present;
Principal Researcher, Microsoft Research, Cambridge, MA, 2015 – 2016;
Assistant Professor, Cornell University, Ithaca, NY, 2006 – 2013.

Professional Interest:

Algorithms; Economics and Computation; Theoretical Machine Learning.

ACM Activities:

Member, SIGACT.

Membership and Offices in Related Organizations:

Steering Committee, Innovations in Theoretical Computer Science, 2016 – Present;
Organizing Committee for "Algorithms and Uncertainty" program, Simons Institute for Theory of Computing, 2016.

Awards:

ACM Conference on Electronic Commerce (EC) Best Paper Award, 2010, 2014;
Sloan Research Fellowship, 2008;
Microsoft New Faculty Fellowship, 2008;
NSF CAREER Award, 2007.

STATEMENT

I am honored to run for the SIGACT Member-at-Large position. I've never been a SIGACT officer before, but I've been active in the theory community for fifteen years. For most of that time I was in academia, but my two significant stints in industry (Akamai and Microsoft) gave me a perspective on the vital ways in which our field is enriched by interactions with industry and vice-versa. My current and past service to the community includes serving as program chair and steering committee member for the Innovations in Theoretical Computer Science (ITCS) conference, co-organizer of the Fall 2016 "Algorithms and Uncertainty" program at the Simons Institute, local co-chair for EC 2018, and frequent service on the program committees of STOC, FOCS, and other theory conferences.

I am extremely grateful for the vital support I've received from colleagues in the theory community at every stage of my career, even (especially) the very earliest stages. As a SIGACT Member-at-Large, I would look forward to giving back to the research community that has been such a support for me, and would be especially keen to help the youngest members of our community thrive.

Candidate for Member-at-Large

Shuchi Chawla
University of Wisconsin - Madison, WI, USA

BIOGRAPHY

Academic Background:

Ph.D., Carnegie Mellon University, 2005, Computer Science.

Professional Experience:

Professor, University of Wisconsin - Madison, WI, 2017 – Present;
Associate Professor, University of Wisconsin - Madison, WI, 2013 – 2017;
Visiting Researcher, Microsoft Research, Seattle, WA, 2013 – 2014.

Professional Interest:

Approximation Algorithms; Algorithmic Game Theory; Algorithmic Mechanism Design;
Online Algorithms; Stochastic Optimization.

ACM Activities:

Member of Committee on Advancement of Theoretical CS (CATCS), SIGACT, 2015 – Present;
Chair of SIGecom Doctoral Dissertation Award Committee, SIGecom, 2016 – 2017;
Member of SIGecom Doctoral Dissertation Award Committee, SIGecom, 2014 – 2017;
Workshops chair for ACM Conference on Economics and Computation (EC), 2017, SIGecom,
2016 – 2017.

Awards:

Alfred P. Sloan Foundation Fellowship, 2009;
NSF Faculty Early Career Development (CAREER) Award, 2007.

STATEMENT

I am honored to be asked to run for the SIGACT member-at-large election. Having served as a member of the CATCS for the past two years, I have derived great pleasure and satisfaction in initiating and participating in projects that benefit the community as a whole. SIGACT is one of the largest ACM SIGs and arguably the broadest in its research focus. As our community continues to grow, one of the most important challenges facing it is cohesiveness and inclusiveness. I am a big supporter of efforts to create a single annual event (theory fest) that brings a large fraction of the community together. Following last year's success, it is important to continue to evolve this event in a way that ensures good participation by senior researchers and is welcoming to junior researchers and graduate students. One of my priorities as a SIGACT officer would be to promote new ways to engage graduate students and postdocs at conferences and to help them network within the community. I am also interested in developing creative ways for the community to support and promote junior researchers on the job market.