

# Balasubramanian Sivan

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## CONTACT INFORMATION

### Office Address

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## EDUCATION

### University of Wisconsin-Madison

*PhD in Computer Science (August 2008 - present)*

Advisor: Prof. Shuchi Chawla

- GPA: 3.8/4, Major: 3.94/4

**Indian Institute of Technology Madras** (August 2004 - July 2008)

*B.Tech in Computer Science and Engineering*

- GPA: 9.39/10, Major: 9.60/10

## RESEARCH INTERESTS

Algorithmic Game Theory, Approximation Algorithms.

## PUBLICATIONS

1. *Asymptotically Optimal Algorithm for Stochastic Adwords*  
with N. Devanur and Y. Azar,  
*ACM Conference on Electronic Commerce 2012 (ACM EC)*.
2. *Single-Call Mechanisms*  
with C. Wilkens,  
*ACM Conference on Electronic Commerce 2012 (ACM EC)*.
3. *Optimal Crowdsourcing Contests*  
with S. Chawla and J. Hartline,  
*ACM-SIAM Symposium on Discrete Algorithms 2012 (ACM-SIAM SODA)*,  
Invited to the special issue of *Games and Economic Behavior (GEB)* from STOC/  
FOCS/ SODA 2012
4. *Near Optimal Online Algorithms and Fast Approximation Algorithms for Resource Allocation Problems*  
with N. Devanur, K. Jain and C. Wilkens,  
*ACM Conference on Electronic Commerce 2011 (ACM EC)*.
5. *Multi-parameter Mechanism Design and Sequential Posted Pricing*  
with S. Chawla, J. Hartline and D. Malec,  
*ACM Symposium on Theory of Computing 2010 (ACM STOC)*.
6. *The Power of Randomness in Bayesian Optimal Mechanism Design*  
with S. Chawla and D. Malec,  
*ACM Conference on Electronic Commerce 2010 (ACM EC)*,  
Accepted to the special invited issue of *Games and Economic Behavior (GEB)*  
from EC 2010 and EC 2011.
7. *On Conditional Covering Problem*  
with S. Harini and C. Pandurangan,  
*Mathematics in Computer Science, Special Issue on "Advances in Combinatorial Algorithms"*, Birkhäuser Basel, 2009.
8. *Core and Conditional Core Path of Specified Length in Special Classes of Graphs*  
with S. Harini and C. Pandurangan,  
Workshop on Algorithms and Computation 2009 (WALCOM).

9. *On Conditional Covering Problem*  
with S.Harini and C. Pandurangan,  
International Workshop on Combinatorial Algorithms 2008 (IWOCA).

#### WORKING PAPERS

1. *Bayesian Mechanisms for Makespan-Minimization*  
with S. Chawla, J. Hartline and D. Malec.

#### PATENTS

1. *Online Resource Allocation Algorithms*  
Patent pending (Microsoft Corporation, September 2011)
2. *Offline Algorithms for Resource Allocation Problems*  
Patent pending (Microsoft Corporation, January 2012)

#### RESEARCH EXPERIENCE

1. Microsoft Research, Redmond - Visitor, April 2012 and August 2011
2. Northwestern University - Visitor, September 2011
3. Microsoft Research, Redmond - Summer Internship, May - July 2010
4. Computer Science Department, University of Wisconsin Madison - Research Assistant, August 2008 - present

#### AWARDS AND HONORS

- Invited to a special event organized by Microsoft Research and Univ. of Washington, for 25 graduate students in Theory - August 2012.
- Computer Sciences alumni scholarship 2008, University of Wisconsin Madison.
- Summer research fellowship, University of Wisconsin Madison - Summer 2009
- Secured Rank one in my School in my Higher Secondary Board Examination

#### WORKSHOP AND SEMINAR PRESENTATIONS

1. Minisymposium on Algorithmic Game Theory, Halifax, June 2012 (upcoming)
2. Barbados, Bellairs Workshop on Algorithmic Game Theory, April 2012.
3. Stanford University, Theory lunch, January 2012.
4. Microsoft Research, Silicon Valley, January 2012.
5. Northwestern University, Theory seminar, September 2011.
6. University of Washington, Theory seminar, September 2011.
7. Microsoft Research, Redmond, August 2011.
8. Greece Economics and Algorithmic Theory (GREAT) workshop, July 2011.
9. Midwest Theory Day, Toyota Technological Institute, Chicago, December 2010.
10. Northwestern University, Theory of Computing seminar, May 2010.
11. Bertinoro workshop on frontiers in mechanism design, Italy, March 2010.
12. University of Wisconsin-Madison, Theory of Computing seminar, Feb 2010.

#### SERVICE

Referee of research contributions in various conferences and journals: STOC(2011), FOCS(2011), SODA (2011, 2012), SICOMP(2012), ICALP(2012), WINE(2009, 2010, 2011), EC(2011), ESA(2011), AAI(2010), Information and Computation(2011)

#### COMPUTER SKILLS

- Languages and Tools - C, C++, Matlab, Maple, L<sup>A</sup>T<sub>E</sub>X