

SUCHETA SOUNDARAJAN

Syracuse University
Department of Electrical Engineering & Computer Science
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<http://soundarajan.org>

EDUCATION

Cornell University
Ph.D. in Computer Science **2013**
Dissertation: Communities in Social Networks
Committee: John Hopcroft (chair), Dexter Kozen, David Pizarro
Minor in Psychology

Cornell University
M.S. in Computer Science **2010**

The Ohio State University
B.S. in Computer/Information Science
B.S. in Mathematics **2005**

EMPLOYMENT

Syracuse University
Assistant Professor, Dept. of Electrical Engineering & Computer Science **2015-current**

Rutgers University
Postdoctoral Associate (Computer Science) **2013-2015**
Supervisor: Tina Eliassi-Rad
Topic: Network Similarity, Longitudinal Network Analysis

Cornell University
Graduate Research Assistant (Computer Science) **2006-2013**
Supervisor: John Hopcroft
Topics: Communities in Networks, Network Contagion, Link Prediction

JOURNAL AND CONFERENCE PUBLICATIONS

(AVAILABLE AT <http://soundarajan.org/papers.html>)

Sucheta Soundarajan and John Hopcroft. "Use of Local Group Information to Identify Communities in Networks". ACM Transactions on Knowledge Discovery from Data (TKDD) 2015.

Sucheta Soundarajan, Tina Eliassi-Rad, and Brian Gallagher. "A Guide to Choosing a Network Similarity Method". SIAM Conference on Data Mining (SDM) 2014.

Bruno Abrahao, Sucheta Soundarajan, Robert Kleinberg, and John Hopcroft. "A Separability Framework For Analyzing Community Structure". ACM Transactions on Knowledge Discovery from Data (TKDD) 2014.

Sucheta Soundarajan and John Hopcroft. "Use of Supervised Learning to Predict Directionality of Links in a Network". 8th International Conference on Advanced Data Mining Applications (ADMA) 2012.

Sucheta Soundarajan and Carla Gomes. "Using Community Detection Algorithms for Sustainability Applications". 3rd International Conference on Computational Sustainability (CompSust) 2012.

Bruno Abrahao, Sucheta Soundarajan, John Hopcroft, and Robert Kleinberg. "On the Separability of Structural Classes of Communities." 18th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) 2012.

Sucheta Soundarajan and John Hopcroft. "Using Community Information to Improve the Precision of Link Prediction Methods." 21st International World Wide Web Conference (WWW) 2012.

2 algorithms from this paper have been added to the Networkx graph library for Python.

John Hopcroft, Sucheta Soundarajan, and Liaoruo Wang. "The Future of Computer Science". International Journal of Software and Informatics (IJSI) 2011.

Sucheta Soundarajan and John Hopcroft. "Recovering Social Networks from Contagion Information". 7th Annual Conference on Theory and Applications of Models of Computation (TAMC) 2010.

WORKSHOP PUBLICATIONS

(AVAILABLE AT <http://soundarajan.org/papers.html>)

Sucheta Soundarajan, Tina Eliassi-Rad, Brian Gallagher, and Ali Pinar. "MaxOutProbe: An Algorithm for Increasing the Size of Partially Observed Networks." NIPS Workshop on Networks in the Social and Information Sciences, 2015.

Sucheta Soundarajan, Tina Eliassi-Rad, Brian Gallagher, and Ali Pinar. "Enriching Incomplete Networks." Workshop in Information Networks (WIN), 2015.

Priya Govindan, Sucheta Soundarajan, and Tina Eliassi-Rad. "Finding the Most Appropriate Auxiliary Data for Social Graph De-anonymization." KDD workshop on Data Ethics, 2014.

Sucheta Soundarajan and Tina Eliassi-Rad. "Which Network Similarity Method Should You Choose: An Empirical Study". Workshop on Information Networks (WIN), 2013.

Bruno Abrahao, Sucheta Soundarajan, John Hopcroft, Robert Kleinberg. "On the Structure of Communities in Networks". Interdisciplinary Workshop on Information and Decision in Social Networks at MIT, 2012.

PROFESSIONAL PRESENTATIONS

Santa Fe Institute. Seminar presentation. August 2014.

Los Alamos National Laboratory. Presentation to Center for Nonlinear Studies. August 2014.

Google, New York City. Presentation to algorithms research group. October 2013.

Rutgers University. Presentation at department seminar series. October 2013.

Air Force Office of Scientific Research Program Review. Presentation of funded research. January 2013.

The Ohio State University. Presentation to data mining group. September 2012.

TEACHING EXPERIENCE

Syracuse University:

CIS 675: Design and Analysis of Algorithms (Fall 2015)

COMMUNITY OUTREACH

Douglass-DIMACS Computing Corps/Girl Scouts

Organizer/Mentor

2013-2015

Led a collaboration between Girl Scouts, New Brunswick Schools, and Rutgers University

Supervised group of undergraduates teaching programming to middle school girls

Assisted in development of lesson plans

Advised undergraduate students in teaching

Girls Who Code/Girls, Inc.

Instructor

2013

Taught JavaScript programming to Brooklyn inner-city middle school girls

Designed lesson plans

Tutored individually

Expand Your Horizons

Organizer

Organized workshops at Cornell University to teach CS concepts to middle school girls **2010-2012**

SERVICE

Program Committee Member:

IJCAI (2016), AAAI (2016, 2015), SIGKDD (2015), CIKM (2015), SDM (2016, 2015, 2014), SIAM NS (2015), MobiSPC (2014)

Journal Reviewer:

Social Network Analysis and Mining (SNAM) (2015), Nature Scientific Reports (2015), Algorithms (2015), Data Mining and Knowledge Discovery (DMKD) (2014)

NSF Panelist:

Information and Intelligent Systems Division (2014)