

## Michael D. Conover

---

CONTACT INFORMATION 919 East 10<sup>th</sup> Street Phone: (812) 322-7380  
Indiana University E-mail: midconov@indiana.edu  
Bloomington, IN 47401

EDUCATION **Indiana University**, Bloomington, Indiana  
Ph.D. Informatics (expected: August 2012)

- Specialization Area: Complex Systems Analysis
- Ph.D. Minor: Statistical Science
- GPA: 3.91

**University of Arizona**, Tucson, Arizona  
B.S.B.A. Management Information Systems, May, 2005

AWARDS AND FELLOWSHIPS Best Student Paper 2011: Honorable Mention (Political Polarization on Twitter)  
*First-ever honorable mention awarded in this category.*  
American Sociological Association Communication and Information Technologies Section  
International Conference on Weblogs and Social Media Travel Award, 2011  
National Science Foundation East Asia & Pacific Summer Institute Fellowship, 2009  
National Science Foundation East Asia & Pacific Summer Institute Fellowship, 2008

RESEARCH EXPERIENCE **Institute for Quantitative Social Science, Harvard University**  
Host: Center for Complex Network Research, Northeastern University  
Supervisor: Dr. David Lazer  
*Visiting Fellow* Summer 2011

**Center for Complex Networks and Systems Research, Indiana University**  
Supervisor: Dr. Alessandro Flammini  
*Research Assistant* 2010 – present

**FLAD Computational Biology Collaboratorium, Instituto Gulbenkian de Ciência**  
Supervisor: Dr. Luis Rocha  
*Research Assistant* Summer 2010

**IBM Tokyo Research Lab**  
Supervisor: Dr. Kohichi Takeda  
*Visiting Fellow* Summer 2009

**Institute of Computing Technology, Chinese Academy of Sciences**  
Supervisor: Dr. Daniel Zeng  
*Visiting Fellow* Summer 2008

**Center for Complex Networks and Systems Research, Indiana University**  
Supervisor: Dr. Filippo Menczer  
*Research Assistant* 2006 – 2007

## PUBLICATIONS

K. McKelvey, A. Rudnick, **M.D. Conover**, F. Menczer. Visualizing Communication on Social Media: Making Big Data Accessible, *Collective Intelligence as Community Discourse and Action Workshop, Proceedings of the 15<sup>th</sup> Conference on Computer Supported Cooperative Work (2012)*

**M.D. Conover**, J. Ratkiewicz, M. Francisco, B. Gonçalves, A. Flammini, F. Menczer. Political Polarization on Twitter, *Proceedings of the 5<sup>th</sup> International Conference on Weblogs and Social Media (2011)*, pp. 89-96.

**M.D. Conover**, B. Gonçalves, J. Ratkiewicz, A. Flammini, F. Menczer. Predicting the Political Alignment of Twitter Users, *Proceedings of the 3<sup>rd</sup> IEEE Conference on Social Computing (2011)*, forthcoming.

J. Ratkiewicz, **M.D. Conover**, B. Gonçalves, A. Flammini, F. Menczer. Detecting and Tracking Political Abuse in Social Media, *Proceedings of the 5<sup>th</sup> International Conference on Weblogs and Social Media (2011)*, forthcoming.

J. Ratkiewicz, **M.D. Conover**, M. Meiss, B. Gonçalves, S. Patil, A. Flammini, F. Menczer. Truthy: Mapping the Spread of Astroturf in Microblog Streams, *Proceedings of the 20<sup>th</sup> International World Wide Web Conference (2011)*, pp. 249-252.

A. Lourenço, **M.D. Conover**, A. Wong, F. Pan, A. Abi-Haidar, A. Nematzadeh, H. Shatkay, L. Rocha. A Linear Classifier Based on Entity Recognition Tools and a Statistical Approach to Method Extraction in the Protein-Protein Interaction Literature, *BMC Bioinformatics*, forthcoming.

A. Zoss, **M.D. Conover**, K. Börner. Where are the Academic Jobs? Interactive Exploration of Job Advertisements in Geospatial and Topical Space, *Proceedings of the 3<sup>rd</sup> International Conference on Social Computing, Behavioral Modeling, and Prediction (2010)*, pp. 237-246

**M.D. Conover**. Advertainment: QR Codes & Japanese Mobile Phone Culture, *Communications of the ACM*, 10(52):8-9.

J. Ma, D. Zeng, **M.D. Conover**. Analyzing Software Function Call Graphs Using a Two-Phase Network Growth Model, *Proc. of the 5th Workshop on E-Business 2006*.

## BOOK CHAPTERS

B. Gonçalves, **M.D. Conover**, F. Menczer. Abuse of Social Media and Political Manipulation, *The Death of the Internet: How it may happen and how it can be stopped*, edited by Markus Jakobsson, forthcoming.

## POSTERS

D. Ruths, B. Kogut, **M.D. Conover**, D. Lazer. The Political Coloring of Corporate Boards: Network Dynamics of Director Selection on the Political Slant of Corporate Interests, *Workshop on Information in Networks 2011*.

J. Ratkiewicz, **M.D. Conover**, B. Goncalves, A. Flammini, F. Menczer. Truthy: Mapping the Spread of Astroturf in Microblog Streams, *International World Wide Web Conference 2011*.

**M.D. Conover**, B. Goncalves, J. Ratkiewicz, A. Flammini, F. Menczer. Visualizing Political Communication, *Journal of Information Technology & Politics 2011: The Future of Computational Social Science*.

## CONFERENCE PANELS

M. Bernstein, **M.D. Conover**, R.S. Geiger, B.M. Hill, A. Monroy-Hernandez, B. Keegan, A. Shaw, S. Yardi, A. Bruckman. Fail Whaling: Designing from Deviance and Failures in Social Computing. *ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2012)*

WORKSHOP  
PRESENTATIONS

**M.D. Conover**, J. Ratkiewicz, B. Goncalves, A. Flammini, F. Menczer. Social Media and the Networked Public Sphere, *Workshop on Information in Networks 2011*.

**M.D. Conover**, J. Ratkiewicz, B. Goncalves, A. Flammini, F. Menczer. Networks of Political Communication I: Multi-Mode Interactions in an Online Social Network, *NetSci 2011: International School and Conference on Network Science*.

INVITED TALKS

**Twitter, Inc.** *Knowledge Discovery in Social Media Streams*

**Quid, Inc.** *Knowledge Discovery in Social Media Streams*

Techniques for leveraging network and text features of social media streams to surface actionable commercial intelligence. (November, 2011)

**ICSA Catalyst 2011** *Counting Raindrops: An Introduction to Data Science*

Overview of core concepts and technologies related to the challenge of discovering structural regularities in large-scale datasets. (September, 2010)

PROFESSIONAL  
ACTIVITIES

Reviewer, *Social Networks*

Reviewer, *Journal of Computer-Mediated Communication*

Reviewer, *Information, Communication and Society*

Reviewer, *Software: Practice and Experience*

Reviewer, *Special Interest Group on Computer Human Interaction (SIGCHI 2011)*

Reviewer, *International Conference on Social Computing (SocialCom 2011)*

Program Committee, *International Conference on Weblogs and Social Media (ICWSM 2012)*

Program Committee, *International Conference on the World Wide Web (WWW 2012)*

Program Committee, *International Conference on Social Informatics (SocInfo 2011)*

Contributor, *Complexity and Social Networks Blog* ([iq.harvard.edu/blog/netgov/](http://iq.harvard.edu/blog/netgov/))

Contributor, *Blogs @ Communications of the ACM* ([cacm.acm.org/blogs/blog-cacm/](http://cacm.acm.org/blogs/blog-cacm/))

TEACHING  
EXPERIENCE

**Indiana University**, Bloomington, Indiana

*Teaching Assistant*

**Fall 2007 – Fall 2010**

Responsibilities included overseeing laboratory sessions, class lectures and assignment design.

- INFO 400: Linked: The Science of Networks from the Social Atom to Facebook (Fall 2010)  
*Dr. Alessandro Vespignani & Dr. Filippo Menczer*
- INFO 211: Information Infrastructure II (Spring 2008, Spring 2009, Spring 2010)  
*Dr. Predrag Radivojac*
- INFO 210: Information Infrastructure I (Fall 2008, Fall 2009)  
*Dr. Mark Meiss, Dr. Larry Yaeger*
- INFO 101: Introduction to Informatics (Fall 2007)  
*Prof. Matt Hottell*

*Guest Lecturer*

**Fall 2008 – Fall 2011**

- JOUR 660: Framing Theory & The Media (Fall 2011)  
*From Data, Insight – Data-driven journalism and strategies for mixed methods research.*
- INFO 501: Introduction to Informatics (Spring 2010)  
*Political Polarization on Twitter – Overview of research methods and findings.*
- INFO 101: Introduction to Informatics (Fall 2008, Spring 2009, Fall 2009)  
*Science is Beautiful – Complex systems analysis and the mathematical beauty of nature.*

PROJECTS AND  
DATASETS

Architect, Truthy Astroturf Tracking & Detection System  
[www.truthy.indiana.edu](http://www.truthy.indiana.edu)

Developer, GiveALink Social Recommendation System  
[www.givealink.org](http://www.givealink.org)

Multiplex Network & Text Dataset: Political Polarization on Twitter  
[cnets.indiana.edu/groups/nan/truthy](http://cnets.indiana.edu/groups/nan/truthy)

Machine Learning Dataset: Astroturf Tweets  
[cnets.indiana.edu/groups/nan/truthy](http://cnets.indiana.edu/groups/nan/truthy)

SELECTED PRESS

**The Wall Street Journal**, October 2011

*Saturday Review: Decoding Our Chatter*

**Science**, September 2011

*Social Scientists Wade Into the Tweet Stream*

**Communications of the ACM**, March 2011

*Twitter as Medium and Message*

**MIT Technology Review**, November 2010

*Bogus Grass-Roots Politics on Twitter*

**NPR Talk of the Nation**, October, 2010

*Tracking The 'Truthiness' Of Tweets*

**NPR Science Friday**, October, 2010

*Tracking Truthy Ideas*

**The Atlantic**, October 2010

*When Campaigns Manipulate Social Media*

**Additional Coverage:** Forbes.com, PC World, New Scientist, Colombia Journalism Review, The Chronicle of Higher Education, Discovery News, International Business Times, Fast Company, The New York Times Magazine, The Register, Christian Science Monitor, Ars Technica, Science Daily, TechEye, HPC Wire, Mobile Computing News, TechYum, Futurity, Examiner.com, Miller-McCune, TheNextWeb, Australian Broadcasting Corporation, Canadian Broadcasting Corporation, El País (Spain), Nyfiken Vital (Sweden), Frankfurter (Germany), Allgemeine Zeitung (Germany), On3 Radio (Germany)

SELECTED VIDEO

**Decoding Our Chatter**

The Wall Street Journal, September 2011

<http://online.wsj.com/article/SB10001424052970204138204576598942105167646.html>

**Political Polarization on Twitter**

International Conference on Weblogs and Social Media, July 2011

<http://videlectures.net/icwsm2011-conover-polarization/>

**Political Communication on Twitter**

Pervasive Technology Institute Data to Insight Seminar Series, April 2011

<https://pti.iu.edu/video/Michael-Conover-D2i-Spring2011>

CORE

**Languages**

TECHNICAL SKILLS Python, Java, R, MATLAB, SQL, Apache Pig Latin, Javascript & HTML, etc.

**Frameworks**

Hadoop, iGraph, NetworkX, NumPy, JUNG, Weka, Gephi, Tableau, Django, Apache, Linux, etc.

**Concepts** Complex Network Analysis, Machine Learning, Text Mining & Topic Modeling, Information Visualization, Large-Scale Data Management, etc.