

Tanushree (Tanu) Mitra

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RESEARCH INTERESTS

My research combines computational techniques and social science principles to study complex social processes underlying human behavior in large-scale online social systems.

Topics: *Social Computing, Computational Social Science, Social Media Content Analysis, Data Mining, Credibility Perceptions, Misinformation & Deception, Online Communities, Quantitative & Qualitative Data Analysis.*

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY, Atlanta, GA USA

Ph.D. in Computer Science

Aug 2011 – Aug 2017

Thesis Topic: *Understanding Social Media Credibility*

TEXAS A&M UNIVERSITY, College Station, TX USA

M.S. Computer Science

Aug 2009 – July 2011

Masters Thesis: *Cooperative Minimalistic Approach to Robotic Aggression*

SIKKIM MANIPAL INSTITUTE OF TECHNOLOGY, Sikkim, India

B.Tech. Computer Engineering

Sep 2001 – Jun 2005

PUBLICATIONS

- 2018 Mattia Samory and **Tanushree Mitra**. Conspiracies Online: User discussions in a Conspiracy Community Following Dramatic Events – *To Appear*, ICWSM 2018.
- 2018 **Tanushree Mitra**, Graham Wright and Eric Gilbert. Credibility and the Dynamics of Collective Attention – *To Appear*, CSCW 2018 Online First.
- 2018 **Tanushree Mitra**, Michael Muller, Sadat Shami, Abbas Golestani and Mikhil Masli. Spread of Employee Engagement in a Large Organizational Network: A Longitudinal Analysis. – *To Appear*, CSCW 2018 Online First.
- 2018 Michael Muller, **Tanushree Mitra**, and Werner Geyer. Growth in Social Network Connectedness among Different Roles in Organizational Crowdfunding. – Group 2018.
- 2017 **Tanushree Mitra**, Graham Wright and Eric Gilbert. “A Parsimonious Language Model of Social Media Credibility Across Disparate Events.” In *Proceedings of the 20th ACM conference on Computer Supported Cooperative Work and social computing* – CSCW 2017
- 2016 **Tanushree Mitra**, Scott Counts and James W. Pennebaker. “Understanding Anti-Vaccination Attitudes in Social Media.” In *Tenth International AAAI Conference on Web and Social Media* – ICWSM 2016
- 2016 Stevie Chancellor, **Tanushree Mitra**, and Munmun De Choudhury. “Recovery amid pro-anorexia: Analysis of recovery in social media.” In *Proceedings of the ACM Conference on Human Factors in Computing Systems*. – CHI 2016

- 2015 **Tanushree Mitra**, and Eric Gilbert. "CREDBANK: A Large-scale Social Media Corpus With Associated Credibility Annotations." In *Ninth International AAAI Conference on Web and Social Media – ICWSM 2015*
- 2015 **Tanushree Mitra**, C.J. Hutto, and Eric Gilbert. "Comparing Person-and Process-centric Strategies for Obtaining Quality Data on Amazon Mechanical Turk." In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*. **Best Paper Honorable Mention (Top 5%)** – CHI 2015
- 2014 Soni Sandeep, **Tanushree Mitra**, Eric Gilbert and, Jacob Eisenstein. "Modeling Factual-ity Judgments in Social Media Text." In *Proceedings of the Association for Computational Linguistics – ACL 2014*
- 2014 **Tanushree Mitra**, and Eric Gilbert. "The language that gets people to give: Phrases that predict success on kickstarter." In *Proceedings of the 17th ACM conference on Computer Supported Cooperative Work and social computing – CSCW 2014*
- 2012 **Tanushree Mitra**, and Eric Gilbert. "Have You Heard?: How Gossip Flows Through Workplace Email." In *Sixth International AAAI Conference on Weblogs and Social Media – ICWSM 2012*.
- 2012 **Tanushree Mitra**, and Dylan A. Shell. "Cost, Precision, and Task Structure in Aggression-Based Arbitration for Minimalist Robot Cooperation." In *Proceedings of the International Conference on Simulation of Adaptive Behavior*. – SAB 2012

AWARDS AND RECOGNITION

GRANTS

- 2018 NSF CRII, awarded \$174,831. Grant proposal as sole PI
- 2018 ICTAS Junior Faculty Award, awarded \$80,000. Grant proposal with CO-PI James Hawdon
- 2015 US Army Research Laboratory, awarded \$131,068. Grant proposal with PI Eric Gilbert.

RESEARCH AWARDS

- 2016 IBM Ph.D. Fellowship Recipient
- 2016 Selected to attend the Consortium for the Science of Socio-Technical Systems (CSST), NSF funded workshop for promising junior investigators
- 2015 ICWSM Student Travel Grant (\$350)
- 2015 Foley Scholar Recipient, Gvu center's highest award for student excellence in research contributions to computing
- 2015 CHI Conference Best Paper Honorable Mention (Top 5% of submission)
- 2014 ACL Travel Award for LTCSS workshop (\$600)
- 2014 Georgia Tech Research & Innovation Conference (GTRIC) Fellowship winner
- 2013 Georgia Tech Research & Innovation Conference (GTRIC) Fellowship winner
- 2012 Winner SAIC: Awarded by Science Applications International Corporation
- 2009-2010 Royce E. Wisenbaker '39 Graduate Fellowship, Texas A&M University
- 2002 1st position for academic performance in undergraduate studies.

SELECTED PRESS COVERAGE

- June, Laura. *Twitter Study Finds Facts Don't Matter to Anti-Vaxxers*. [NYMag](#)
- Hodson, Hal. *Hoax spotter finds a quarter of everything on Twitter is false*. [New Scientist](#) (2015)

- Hooton, Christopher. *25% of everything on Twitter is false*. [The Independent](#) (2015)
- Abbruzzese, Jason. *The Key to Kickstarter Success*. [Mashable](#) (2014)
- McFarland, Matt. *Step 1 to receiving money on Kickstarter: Give back*. [Washington Post](#) (2014)
- Bercovici, Jeff. *To Get Funded On Kickstarter* [Forbes](#) (2014)
- Bradford, Harry. *Office Gossip Found In Nearly 15% Of Enron's Emails* [Huffington Post](#) (2012)
- Mielach, David. *Why Office Gossip Isn't a Bad Thing After All* [Yahoo News](#) (2012)

EMPLOYMENT HISTORY

RESEARCH ASSISTANT

- **School of Interactive Computing**, Georgia Institute of Technology 2011 – June 2017
I have used computational techniques and human centered methods to understand key social media behaviors, such as organizational gossip, factors driving people to donate to crowd funded projects and credibility of social media content.
- **Dept. of Computer Science**, Texas A&M University 2009 – 2011
I designed and implemented an optimization algorithm for selecting the most influential nodes in a social network for new product promotion. As part of my master's thesis, I studied strategies for aggression resolution in multiple robot systems.
- **Computing & Information Services**, Texas A&M University 2010 – 2011
Maintained data base information systems in SQL developer to support the student IT system at the Texas A&M University (over 50,000 students).

INTERNSHIPS

- **IBM Research, Cambridge, MA USA** May 2016 – July 2016
With Michael Muller – [Collaborative User Experience \(CUE\) Group](#)
I studied employee engagement and disengagement contagion across a large multinational corporation.
- **Microsoft Research, Redmond, WA USA** May 2015 – July 2015
With Scott Counts & James W. Pennebaker – [Nexus Group](#)
I studied the social constructs behind persistent misbeliefs among social media users focusing on one topic – people's belief that vaccinations cause autism.
- **IBM Research, Cambridge, MA USA** May 2013 – July 2013
With Jennifer Thom-Santelli, Michael Muller, and David Millen – [\(CUE\) Group](#)
Using machine-learning techniques, I developed a framework to automate the identification of 'ideas' and, 'pro' and 'con' responses in online text-based brainstorming sessions.
- **Schlumberger Ltd., Houston, TX USA** May 2010 – July 2010
I automated the extraction, loading, calculation, and reporting of financial data for the company's business units, providing a 10% increase in speed.
- **Center for Development of Advanced Computing, India** Spring – Summer 2005
As an undergraduate scholar, I collaborated with research scientists and analyzed the Worst Case Execution Time for ARM7TDMI processor in C++.

SOFTWARE ENGINEER

- **Alcoa Inc., Pittsburgh, PA USA** Sept. 2005 – Aug. 2009
Lead developer for creating applications in Oracle Hyperion Performance Management Suite. Key contributor in reducing the running time of closing scripts by about 90%.

TEACHING EXPERIENCE

Instructor, Virginia Tech, Blacksburg, VA

- CS 6724: Computational Social Science (Graduate Seminar, 18 students) Spring 2018
- CS 4984: Social Computing Capstone (Undergraduate, 18 students) Fall 2017

Teaching Assistant, Georgia Institute of Technology, Atlanta, GA

- CS 4001: Computing, Society and Professionalism Summer 2017
- CS 4472: Design of Online Communities Spring 2016
- CS 8903: Social Computing Fall 2012

MENTORING & ADVISING**Visiting Scholar**, Virginia Tech

Fall 2017

- Mattia Samory – Ph.D., University of Padova.

Ph.D. Students, Virginia Tech

- MD Momen Bhuiyan – Ph.D. CS Fall 2017

M.S. Students, Virginia Tech

- Ashish Baghudana – M.S. CS Fall 2017
- Shruti Phadke – M.S. CS (ECE) Fall 2017

B.S. Students

- Margaret Stump – B.S. C.S. Spring 2018
- Andy Du Zhang – B.S. C.S. Spring 2018
- Hithesh Peddamekala – B.S. C.S. Spring 2018
- Matthew Bernas – B.S. C.S. Spring 2018
- Kexin Zhang – B.S. IsYE (GaTech) Fall 2016 to present

Previously Mentored Students

- Shruthi K. Hiremath – M.S. C.S. (GaTech): *Masters Research Project* Fall 2016
- Sanjana Shankar – M.S. C.S. (GaTech): *Masters Thesis Project* Spring 2016 to Present
- Graham Wright – B.S. C.S. (GaTech): *Credibility Project* Summer 2015 to Present
- Akanksha – M.S. C.S. (GaTech): *Masters Thesis Project* Fall 2015
- Amish Goyal – M.S. C.S. (GaTech): *Topic Modeling in Twitter* Fall 2013
- Mohammad Asgharneya – M.S. C.S. (GaTech): *Detecting Stock Market Liars* Fall 2012
- Karthik Uppuluri – B.S. C.S. (GaTech): *Comparing Tweets & Queries* Summer 2012
- Sarena Chism – Undergraduate Research Scholar, Texas A&M Louis Stokes Alliance for Minority Participation (LSAMP) program Fall 2009 - Spring 2010

PROFESSIONAL ACTIVITIES

SENIOR PROGRAM COMMITTEE	ICWSM 2018, ICWSM 2016
PROGRAM COMMITTEE	CHI-LBW 2018, CSCW 2018, WWW 2018, 2015, ICWSM 2014, 2015
REVIEWER	CHI 2014-2017, CSCW 2013-2016, WSDM 2014, WWW 2016