# Shawndra Hill

Curriculum Vitae

Address: Facebook

770 Broadway New York, NY 10003

Email: shawndrahill@fb.com

WWW: https;//www.shawndrahill.com

Citizenship: USA

## Background

January 2022

#### Education

2007	Ph.D. in Information Systems	New York University
2003	M.Phil. in Information Systems	New York University
1995	BEE in Electrical Engineering	Georgia Institute of Technology
1995	BS in Mathematics	Spelman College

## **Employment**

,	
April 2020 –	Principal Scientist and Manager, Core Data Science Facebook New York City
Oct 2020 –	Senior Lecturer, Marketing Columbia Business School
Jan 2015 – April 2020	Principal Researcher, Computational Social Science Microsoft Research New York City
Jul 2009 –	Visiting Professor, Information Technology Department Addis Ababa University
Jul 2015 – June 2016	Adjunct Associate Professor, Operations and Information Management The Wharton School, University of Pennsylvania
Jul 2007 – Jun 2015	Assistant Professor, Operations and Information Management The Wharton School, University of Pennsylvania
Nov 2014 – Dec 2014	Visiting Professor, Information Systems Indian School of Business
May 2003 – Dec 2015	Visiting Researcher AT&T Labs Research
Jul 2006 – Jun 2007	Instructor, Operations and Information Management The Wharton School, University of Pennsylvania
May 1999– Jul 2000	Account Manager Siemens Energy & Automation
Mar 1995 – Apr 1999	Commissioning Engineer (Steel) Siemens Energy & Automation

## Other Academic Affiliations

- Working Group on Women of Color in Computing, National Academies of Sciences, Engineering and Medicine
- University of the People, Computer Science Advisory Board
- Board on Mathematical Sciences and Analytics, National Academies of Sciences, Engineering and Medicine
- Senior Fellow, Wharton Customer Analytics, University of Pennsylvania

## **Current Articles Under Review or Revision**

• Krupenkin, M., Hill, S., and Rothschild, D. Partisanship and risky financial decisions. Tech. rep., Technical report, Working Paper, 2018

- LIU, J., HILL, S., AND ROTHSCHILD, D. The impact of temporally turning off tv ad on search: A generalized synthetic control estimator under interference. *In Preparation to be Submitted to Marketing Science* (2019)
- Krupenkin, M., Hill, S., and Rothschild, D. Do campaign ads matter? limitations of political advertising in a negative news context. *In Prepartion to be Submitted to Marketing Science* (2019)

#### **Publications**

#### Journal Articles

- 1. Liu, J., Toubia, O., and Hill, S. Content-based model of web search behavior: An application to TV show search. *Management Science* 67, 10 (2021), 6378–6398
- 2. Simonov, A., and Hill, S. Competitive advertising on brand search: Traffic stealing and click quality. *Marketing Science* 40, 5 (2021), 923–945
- 3. HINZ, O., HILL, S., AND SHARMA, A. The influence of context on online shopping behavior: The case of concurrent TV consumption. *Information Systems Research* (2021)
- 4. Liu, J., and Hill, S. Frontiers: Moment marketing: Measuring dynamics in cross-channel ad effectiveness. *Marketing Science* 40, 1 (2021), 13–22
- 5. Swaminathan, V., Schwartz, A., Hill, S., and Menezes, R. The language of brands in social media: Using topic modeling on social media conversations to drive brand strategy. *Journal of Interactive Marketing* (2021)
- HILL, S., BENTON, A., AND PANNIELLO, U. Talkographics: Measuring TV and brand audience demographics and interests from user-generated content. *International Journal of Electronic Commerce* 23, 3 (2019), 364–404
- 7. Zhang, H., Hill, S., and Rothschild, D. Addressing selection bias in event studies with general-purpose social media panels. *Journal of Data and Information Quality (JDIQ)* 10, 1 (2018), 4
- 8. Konitzer, T., Rothschild, D., Hill, S., and Wilbur, K. C. Using big data and algorithms to determine the effect of geographically targeted advertising on vote intention: Evidence from the 2012 U.S. presidential election. *Political Communication* (2018), 1–16
- 9. Krupenkin, M., Rothschild, D., Hill, S., and Yom-Tov, E. President trump stress disorder: partisanship, ethnicity, and expressive reporting of mental distress after the 2016 election. *Sage open* 9, 1 (2019), 2158244019830865
- Huberman, G., Konitzer, T., Krupenkin, M., Rothschild, D., and Hill, S. Economic expectations, voting, and economic decisions around elections. In AEA Papers and Proceedings (2018), vol. 108, pp. 597–602
- 11. Demisse, G., Tadesse, T., Atnafu, S., Hill, S., Wardlow, B., Bayissa, Y., and Shiferaw, A. Information mining from heterogeneous data sources: A case study on drought predictions. *Information* 8, 3 (2017), 79
- 12. Hinz, O., Hill, S., and Kim, J. TV's dirty little secret: The negative effect of popular TV on online auction sales. MIS Quarterly 40, 3 (2016), 623–644
- 13. Panniello, U., Hill, S., and Gorgoglione, M. The impact of profit incentives on the relevance of online recommendations. *Electronic Commerce Research and Applications* 20 (2016), 87–104
- 14. Panniello, U., Hill, S., and Gorgoglione, M. Using context for online customer re-identification. *Expert Systems with Applications* 64 (2016), 500–511
- 15. Griffis, H. M., Band, R. A., Ruther, M., Harhay, M., Asch, D. A., Hershey, J. C., Hill, S., Nadkarni, L., Kilaru, A., Branas, C. C., et al. Employment and residential characteristics in relation to automated external defibrillator locations. *American heart journal* 172 (2016), 185–191

- 16. Padrez, K. A., Ungar, L., Schwartz, H. A., Smith, R. J., Hill, S., Antanavicius, T., Brown, D. M., Crutchley, P., Asch, D. A., and Merchant, R. M. Linking social media and medical record data: a study of adults presenting to an academic, urban emergency department. *BMJ Quality Safety 25*, 6 (2016), 414–423
- 17. Weeg, C., Schwartz, H. A., Hill, S., Merchant, R. M., Arango, C., and Ungar, L. Using twitter to measure public discussion of diseases: a case study. *JMIR public health and surveillance* 1, 1 (2015)
- 18. Griffis, H. M., Kilaru, A. S., Werner, R. M., Asch, D. A., Hershey, J. C., Hill, S., Ha, Y. P., Sellers, A., Mahoney, K., and Merchant, R. M. Use of social media across us hospitals: Descriptive analysis of adoption and utilization. *Journal of Medical Internet Research* 16, 11 (2014)
- 19. Merchant, R. M., Griffis, H. M., Ha, Y. P., Kilaru, A. S., Sellers, A. M., Hershey, J. C., Hill, S. S., Kramer-Golinkoff, E., Nadkarni, L., Debski, M. M., et al. Hidden in plain sight: A crowdsourced public art contest to make automated external defibrillators more visible. *American journal of public health* 104, 12 (2014), 2306–2312
- 20. Ben-Assuli, O., Shabtai, I., Leshno, M., and Hill, S. EHR in emergency rooms: Exploring the effect of key information components on main complaints. *Journal of Medical Systems* 38, 4 (2014), 1–8
- 21. Hill, S. TV audience measurement with big data. Big Data 2, 2 (2014), 76-86
- 22. Merchant, R. M., Asch, D., Hershey, J. C., Griffis, H., Hill, S., Saynisch, O., Leung, A., Asch, J., Lozada, K., Nadkarni, L., Kilaru, A., Branas, C., Starr, L., Shofer, F., Nichol, G., and Becker, L. B. A crowdsourcing innovation challenge to locate and map automated external defibrillators. *Circulation: Cardiovascular Quality and Outcomes* 6 (2013), 229–236
- 23. Benton, A., Hill, S., Ungar, L., Chung, A., Leonard, C. E., Freeman, C., and Holmes, J. H. A system for de-identifying medical message board text. *BMC Bioinformatics* 12, 3 (2011), s2
- 24. Benton, A., Ungar, L., Hill, S., Hennessy, S., Mao, J., Chung, A., Leonard, C. E., and Holmes, J. H. Identifying potential adverse effects using the web: A new approach to medical hypothesis generation. *Journal of Biomedical Informatics* 44, 6 (2011), 989–996
- 25. HILL, S., MAO, J., UNGAR, L., HENNESSY, S., LEONARD, C. E., AND HOLMES, J. H. The rise of h1n1 and herbal supplements. *Journal of Medical Internet Research* 14, 2 (2011)
- 26. HILL, S., AND READY-CAMPBELL, N. Expert stock picker: The wisdom of (the experts in) crowds. *International Journal of Electronic Commerce* 15, 3 (2011), 73–102
- 27. HILL, S., AGARWAL, D., BELL, R., AND VOLINSKY, C. Building an effective representation for dynamic networks. *Journal of Computational & Graphical Statistics* 15, 3 (2006), 584–608
- 28. HILL, S., Provost, F., and Volinsky, C. Network-based marketing: Identifying likely adopters via consumer networks. *Statistical Science* 21, 2 (2006), 256–276
- 29. Bernstein, A., Provost, F., and Hill, S. Toward intelligent assistance for a data mining process: An ontology-based approach for cost-sensitive classification. *IEEE Transactions on Knowledge and Data Engineering* 17, 4 (2005), 503–518
- 30. Mao, J. J., Chung, A., Benton, A., Hill, S., Ungar, L., Leonard, C. E., Hennessey, S., and Holmes, J. Online discussion of drug side effects and discontinuation among breast cancer survivors. *Pharmacoepidemiology and Drug Safety* 22, 3 (2013), 256–62
- 31. Berhan, G., Hill, S., Atnafu, S., and Tadesse, T. Drought prediction system for improved climate change mitigation. *IEEE Transactions on Geoscience and Remote Sensing (TGRS) PP*, 99 (2013), 1–6
- 32. Ranard, B. L., Ha, Y. P., Meisel, Z. F., Asch, D. A., Hill, S., Becker, L. B., Seymour, A. K., and Merchant, R. M. Crowdsourcing—harnessing the masses to advance health and medicine, a systematic review. *Journal of General Internal Medicine* (2013), 1–17
- 33. HILL, S., MERCHANT, R., AND UNGAR, L. Lessons learned about public health from online crowd surveillance. *Big Data* 1, 3 (2013), 160–167

- 34. Chang, A. M., Leung, A., Saynisch, O., Griffis, H., Hill, S., Hershey, J. C., Becker, L. B., Asch, D., Seidman, A., and Merchant, R. M. Using a mobile app and mobile workforce to validate data about emergency public health resources. *Emergency Medicine Journal* (2013)
- 35. Leung, A., Asch, D., Lozada, K., Saynisch, O., Asch, J., Becker, N., Griffis, H., Shofer, F., Hershey, J. C., Hill, S., Branas, C., Nichol, G., Becker, L. B., and Merchant, R. M. Where are life-saving automated external defibrillators located and how hard is it to find them in a large urban city? *Resuscitation* 84, 7 (2013), 910–914
- 36. Bosley, J. C., Zhao, N., Hill, S., Shofer, F., Asch, D., Becker, L. B., and Merchant, R. M. Decoding twitter: Surveillance and trends for cardiac arrest and resuscitation communication. *Resuscitation* 84, 2 (2012), 206–212
- 37. Benton, A., Holmes, J., Hill, S., Chung, A., and Ungar, L. H. Medpie: An information extraction package for medical message board posts. *Bioinformatics* 28, 5 (2012), 743–744
- 38. Berhan, G., Tadesse, T., Atnafu, S., and Hill, S. Using satellite images or drought monitoring: A knowledge discovery approach. *Journal of Strategic Innovation and Sustainability* 7, 1 (2011), 135–153
- 39. HILL, S., AND PROVOST, F. The myth of the double-blind review? author identification using only citations. *SIGKDD Explorations* 5, 2 (2003), 179–184

#### Selected Conference Papers

- 35. ABEBE, R., HILL, S., VAUGHAN, J. W., SMALL, P. M., AND SCHWARTZ, H. A. Using search queries to understand health information needs in africa. In *Proceedings of the International AAAI Conference on Web and Social Media* (2019), vol. 13, pp. 3–14
- 36. Zhang, Q., Hill, S., and Rothschild, D. Post purchase search engine marketing. In *Companion Proceedings of the The Web Conference 2018* (2018), pp. 663–670
- 37. GOVINDAN, P., ELIASSI-RAD, T., Xu, J., HILL, S., AND VOLINSKY, C. Structural features threaten privacy across social graphs. In *Data Mining in Networks (DaMNet) ICDM* (2014)
- 38. HILL, S., Benton, A., and den Bulte, C. V. When does social network-based prediction work? a large scale analysis of brand and tv audience engagement by twitter users. In *International Conference on Information Systems (ICIS)* (2013)
- 39. Ben-Assuli, O., Leshno, M., Itamar, S., and Hill, S. Improving medical decision-making using electronic health records systems. In *International Conference on Information Systems (ICIS)*
- 40. Benton, A., and Hill, S. The spoiler effect?: Designing social TV content that promotes ongoing wom. In *Conference on Information Systems and Technology (CIST)* (2012)
- 41. HILL, S., AND BENTON, A. Social TV: Linking TV content to buzz and sales. In *International Conference on Information Systems (ICIS)* (2012)

#### **Book Chapters**

• Berhan, G., Tadesse, T., Atnafu, S., and Hill, S. Experiences of Climate Change Adaptation in Africa. Springer, 2011, ch. Knowledge Discovery from Satellite Images for Drought Monitoring: A Case Study in Ethiopia, pp. 183–200

## Selected Articles and Extended Abstracts in Refereed Workshop Proceedings

- HILL, S., AND BEN-ASSULI, O. Social TV: Social media to predict offline TV viewing in advance. In Workshop on Information Technologies and Systems (WITS) (Milan, Italy, December 2013)
- HILL, S. Social media engagement leads to loyalty: A case study from social TV. In Workshop on Information Technologies and Systems (WITS) (Milan, Italy, December 2013)
- Ben-Assuli, O., Leshno, M., Shabtai, I., and Hill, S. Assessing the contribution of EHR systems to medical decision making. In *Workshop on Information Technologies and Systems (WITS)* (Orlando, FL, December 2012), pp. 163–168

- HILL, S., BENTON, A., AND Xu, J. Social media-based social TV recommendation system. In Workshop on Information Technologies and Systems (WITS)
- HILL, S., NALAVADE, A., AND BENTON, A. Social TV: Real-time social media response to TV advertising. In *Proceedings of the Sixth International Workshop on Data Mining for Online Advertising and Internet Economy* (2012), ACM, p. 4
- HILL, S., BENTON, A., UNGAR, L., CHUNG, A., MACKSKASSEY, S., AND HOLMES, J. H. A cluster-based method for identifying influence on twitter. In Workshop on Information Technologies and Systems (WITS) (Shanghai, China, December 2011)
- Berhan, G., Hill, S., Tadesse, T., and Atnafu, S. Geographic information systems and geo-statistics for modeling and mapping endangered species: A case study in bonga forest of ethiopia. In Global Information Technology Management Association (GITMA) (Las Vegas, NV, June 2011)
- Benton, A., Hill, S., Ungar, L., Chung, A., and Holmes, J. H. A system for de-identifying medical message board text. In *Proceedings of the International Conference on Machine Learning Applications (ICMLA)* (Washington, D.C., 2010)
- Berhan, G., Tadesse, T., Atnafu, S., and Hill, S. Knowledge discovery from satellite images for drought monitoring: A case study in ethiopia. In *Proceedings of the Global Information Technology Management Association World Conference (GITMA)* (Washington, D.C., June 2010)
- Vastola, J., Abayomi, K., and Hill, S. Statistics for re-identification signatures in networked data. In *Workshop on Information Networks (WIN)* (NYU, September 2010)
- HILL, S., Berhan, G., Banser, A., and Eagle, N. Reality mining africa. In *Proceedings of the AAAI Symposium on Artificial Intelligence for Development* (Stanford, March 2010), pp. 45–50
- YIGZAW, M., HILL, S., BANSER, A., AND LESSA, L. Using data mining to combat infrastructure inefficiencies: The case of predicting non-payment for ethiopian telecom. In *Proceedings of the AAAI Symposium on Artificial Intelligence for Development* (Stanford, March 2010)
- Besheh, T., and Hill, S. Mining road traffic accident data to improve road safety: The role of road-related factors on accident severity in ethiopia. In *Proceedings of the AAAI Symposium on Artificial Intelligence for Development* (Stanford, March 2010)
- HILL, S., AND NAGLE, A. Social network signatures: A framework for re-identification in networked data. In *Proceedings of the International Conference on Computational Aspects of Social Networks (CASON '09)* (Fontainebleau, France, June 2009)
- HILL, S., AND READY-CAMBELL, N. Expert stock picker: The wisdom of (the experts in the) crowds. In 1st International Workshop on Mining Social Media, Data Mining and Machine Learning (Sevilla, Spain, November 2009)
- HILL, S., Provost, F., and Volinsky, C. Learning and inference in massive social networks. In *Proceedings of the 5th International Workshop on Mining and Learning with Graphs* (Firenze, Italy, August 2007), pp. 47–50
- HILL, S., AGARWAL, D., BELL, R., AND VOLINSKY, C. Tuning representations of dynamic network data. In *Proceedings of the 3rd International Workshop on Link Discovery (LinkKDD '05)* (Chicago, IL, August 2005), pp. 25–27
- Hill, S. Social network relational vectors for anonymous identity matching. workshop on learning statistical models from relational data (srl 2003). In *International Joint Conference on Artificial Intelligence (IJCAI 2003)* (Acapulco, Mexico, August 2003). paper extended to reference #[52]
- Bernstein, A., Clearwater, S., Hill, S., Perlich, C., and Provost, F. Discovering knowledge from relational data extracted from business news. workshop on multi-relational data mining (mrdm 2002). In 8th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (Edmonton, Alberta, July 2002)

## Other Refereed Papers and Abstracts

- Benton, A., Ungar, L., Hill, S., Hennessy, S., Mao, J., Chung, A., Leonard, C. E., and Holmes, J. H. Mining internet conversations for evidence of supplement-associated adverse events. In *Proceedings of the American Medical Informatics Association (AMIA)*
- Hill, S. Social network-based marketing: Discovering the relationship between homophily, word-of-mouth recommendations, and advertising on application adoption and diffusion using face-book. In *Proceedings of the Winter Conference on Business Intelligence* (Salt Lake City, Utah, February 2010)
- Berhan, G., Hill, S., and Eagle, N. Detecting social network communities using mobile phone call data. In *Proceedings of the Global Information Technology Management Association World Conference* (GITMA) (Washington, D.C., June 2010)
- HILL, S., Provost, F., and Volinsky, C. Collective inference for social networks. In *Proceedings of the Symposium on Statistical Challenges in Ecommerce, NYU* (New York, NY, May 2008)
- Hill, S. Customer heterogeneity: A positive side effect of network-based target marketing. In *Proceedings of the AMA Marketing and Public Policy Conference* (Washington, D.C., June 2007)
- HILL, S., Provost, F., and Volinsky, C. The gift of gab: Evidence tel-ecommerce firms can profit from viral marketing. In *Proceedings of the Symposium on Statistical Challenges in Ecommerce* (2005)
- HILL, S., AND SUNDARARAJAN, A. Evolve: Evolutionary organizational learning in variable environments. In *Proceedings of the Computational Analysis of Social and Organizational Systems Conference* (Pittsburgh, PA, June 2004), Carnegie Melon University

#### **Teaching**

- CIT828, University of Addis Ababa, "Business Intelligence, Data Warehousing, and Data Mining".
   Summer 2009, Summer 2010, Summer 2011, Fall 2016
- OPIM 672, Wharton, "Data Mining for Business Intelligence". Fall 2015
- Indian School of Business, "Data Mining". Fall 2014
- OPIM 950, Wharton, "Information Systems Seminar". Fall 2012, Spring 2013
- Executive Education, Wharton, "Social Media", Google, Glaxo Smith Kline
- OPIM 410/672, Wharton, "Data Mining for Business Intelligence". Spring 2008, Spring 2009, Spring 2010, Spring 2011, Spring 2013, Spring 2014
- CIT828, University of Addis Ababa, "Business Intelligence, Data Warehousing, and Data Mining".
   Summer 2009, Summer 2010, Summer 2011
- OPIM 101, Wharton, "Introduction to Information and Operations Management". Spring 2007, Spring 2008, Spring 2009, Spring 2010
- C20.001, NYU, "Information Technology in Business and Society". Spring 2004

Honors	
2019	Microsoft's Hackathon Marketing Challenge 3rd Place Winner
2019	Best Poster Award, Winter Conference on Business Analytics
2018	Microsoft's Hackathon Marketing Challenge 1st Place Winner
2018	Best Paper Award, China Marketing International Conference
2014	MBA Teaching Commitment and Curricular Innovation Award
2013	Blacks in Action (STEM Research), Alpha Kappa Alpha Sorority, Inc.
2012	Global Competition for Social Media Excellence: Social Media Leadership Award organized by Knowledge@Wharton and Social Strategy
2012	ECRI Institute Health Devices Achievement Award (finalist)
2010	AIS Volunteer Spotlight
2009	INFORMS ISS Design Science Award
2007	Finalist INFORMS George B. Dantzig Dissertation Award
2007	Herman E. Kroos Best Dissertation Award
2005	Finalist, Fifth Annual e-BRC Doctoral Support Award Competition, Penn State University
2005	Selected for Fifth Annual Transatlantic Doctoral Consortium, London Business School, London, England
2005	Selected for Blacks in Action, Alpha Kappa Alpha Sorority, Inc.
2004	Selected for Fred Renwick Research Fellowship
2003	Recognized for Outstanding Ph.D. Student Teaching
2003	3rd Place, KDD Cup 2003 Open Task Competition
2001	Selected for NYU Graduate and Opportunity Fellowship
2001	Selected for KPMG Information Systems Doctoral Fellowship
2003,2005	Selected for NBMBAA, New York Chapter Ph.D. Scholarship
1991	NASA undergraduate research scholar

## **Invited Talks**

- Cross Channel Advertising
  - Northwestern, Kellogg Marketing, Evanston, IL, May 2019
- Cross Channel Advertising
  - Emory Business Analytics Conference, Atlanta, GA, May 2018
  - BlackComputeHer Conference, Atlanta, GA, April 2018
  - Business Analytics Forum, Knoxville, TN, April 2018
  - Xbox MAGNETO, Seattle, WA, February 2018
  - MSICustomer Analytics Conference, San Francisco, CA, February 2018
  - AMA Marketing Conference, New Orleans, LA, February 2018
  - Workshop on Information Systems Economics (WISE), Seoul, Korea, December 2017
  - MSR Econ Conference, Redmond, WA, December 2017
  - Women of Color in STEM Workshop, National Academies of Sciences, Engineering, Medicine, Washington DC, November 2017
  - Grace Hopper, Orlando, FL, October 2017
  - Tapia, Atlanta, Georgia, September 2017
  - Marketing Dynamics, Hong Kong, August 2017

- Entertainment Analytics Conference, Los Angeles, CA, July 2017
- Statistical Challenges of E-commerce Research (SCECR), Ho Chi Minh City, Vietnam, June 2017
- Keynote at Black Women in Computing Luncheon at Grace Hopper 2016 (http://blackwomenincomputing.org/ghc2016/bwic-luncheon-2016/)
- Keynote @ Deutsche Bank Board meeting in Palo Alto, Nov 28, 2016
- Keynote @ Computational Social Science (http://www.kellogg.northwestern.edu/news-events/conference/ic2s2/2016/people/speakers.aspx)
- Planary: Successful Applications of Business Analytics 2017 (http://wcai.wharton.upenn.edu/wcaiconf17/)
- Planary: NetSci 20017 (http://netsci2017.net/program/speakers)
- Tutorial @ Statistical Challenges on E-Commerce 2016 on Azure ML. Sparked a lot of sign ups for Azure by b-school faculty.
- Winter Conference on Business Intelligence 2017
- Union College, 2016
- Northwestern University, 2016
- WISE 2016
- SCECR 2016
- Guest Lectures NYU Data Mining Course
- ATT Labs Research, 2017
- Microsoft: Mavens Opening Session
- Microsoft: NexTech Africa
- Microsoft: MLADS 2016
- Microsoft: Webinar on Search + TV
- Microsoft: University of Chicago + MSR Big Data

#### Second Screen

- Keynote: Computation Social Science Conference, June 2016
- Data Eng Conf NYC, October 2015
- Distinguished Lecture CMU, December 2015
- Invited Talk at Cornell Tech, February 2016
- University of Utah, February 2016
- Marketing Science Institute (MSI) Trustees Meeting, April 2016

#### Social TV

- PhD Project Annual Conference, Puerto Rico, August 2015
- University of California Irvine, May 2015
- Guest Lecture, NYU Stern, May 2015
- Digital Hollywood, Los Angeles, CA, April 2015
- Keynote: Big Data Symposium, University of Illinois at Chicago, March 2015
- WISE, Auckland, NZ, December 2015
- University of San Diego, October 2014
- From Innovation to Market Successes Symposium, Erasmus University, May 2014
- Erasmus University, May 2014
- ADS CON, New York, February 2014

- University of Texas at Austin, February 2014
- Telecom Italia, December 2013
- Marketing Science Institute, Boston, December 2013
- Boston University, December 2013
- NYU Stern, December 2013
- University of California Davis, November 2013
- Keynote: Indian School of Business (ISB) Digital Summit, August 2013
- Keynote: Strata, October 2013
- Keynote: Blacks in Action Awards (STEM), Alpha Kappa Alpha Sorority, Inc., June 2013
- Social TV: Linking TV to Buzz and Sales
  - NYC Media Lab Roundtable on Will Big Data Save TV, May 2013
  - Georgia Institute of Technology, April 2013
  - Winter Conference on Business Intelligences, March 2013
  - Temple University, February 2013
  - Minne Analytics Conference, University of Minnesota, January 2013
  - Indian School of Business (ISB), January 2013
  - Emory University, December 2012
  - University of Michigan, November 2012
  - Keynote: Social Media for Business, Kampala, Uganda, September 2012
  - Statistical Challenges in E-Commerce Research, Montreal, June 2012
  - INFORMS, Pheonix, AZ, October 2012
  - Wharton Sports Initiative Conference, NY, September 2012
  - Workshop on Information in Networks, NY, September 2012
- Mining Twitter and Medical Discussion Board Data
  - Big Data and Health (BDAH), Singapore, July 2014
  - INFORMS, Pheonix, AZ, October 2012
  - IMA, Minneapolis, MN, May 2012
  - University of Minnesota, May 2012
  - University of Maryland, April 2012
- Identifying Influence in Networks
  - Winter Conference on Business Intelligence, SLC, Utah, March 2012
  - Statistical Challenges in E-Commerce Research, Montreal, June 2012
- Data Mining for Business Intelligence
  - Google Uganda, March 2012
  - WCAI Google Executive Education Program, May 2011
  - Keynote: ICT for Africa Conference, March 2012
- Teaching Business Analytics
  - IS Teaching Workshop, Tutorial on Text Mining, Emory, Atlanta, GA, May 2015
  - SCECR 2014, Tutorial on Text Mining, Tel Aviv, Israel, June 2014
  - DSI, San Deigo, CA, November 2010

- Online Wisdom of Crowds
  - Polytechnic Bari, Bari, Italy, August 2010
  - Tel Aviv University, July 2009
  - Research Seminar Series, INSEAD, June 2009
- Information Systems in the Developing World
  - IBM Watson Research Center, Hawthorne, NY, June 2010
  - GITMA, Washington, DC, June 2010
  - AAAI Spring Symposium on Artificial Intelligence for Development (AI-D), Stanford, March 2010
  - AMCIS Panel: An International Model for IS Ph.D. Program in Low-Income Countries, San Francisco, August 2009
- Re-Identification in Networks
  - IMA, Minneapolis, MN, February 2012
  - INFORMS, Austin, November 2010
  - INSNA-Sunbelt Social Networks Conference XXX, Riva del Garda, Italy, July 2010
  - CAARMS, Baltimore, June 2010
  - Information Security Best Practices, Wharton, January 2009
  - INFORMS, Washington, D.C., October 2008
  - University of Pittsburgh, October 2008
- Inference in Consumer Networks
  - EMTM, Philadelphia, January 2011
  - Supernova Conference, Philadelphia, August 2010
  - ALIOS-INFORMS Joint International Meeting, Buenos Aires, Argentina, June 2010
  - WIMI-Penn Interactive Media Colloquium, Wharton, March 2010
  - Supernova Conference, San Francisco, December 2009
  - INFORMS, San Diego, October 2009
  - Data Mining Meets Marketing Conference, UT Austin, August 2009
  - Social Networks Conference, Fontainebleau, France, June 2009
  - Social Graph Symposium, Sun Microsystems, May 2009
  - EMTM, Wharton, May 2009
  - WIMI-Modeling Social Network Data, Wharton, January 2009
  - Wharton Marketing Conference, Philadelphia, November 2008
  - Supernova Conference, San Francisco, June 2008
- Collective Inference in Consumer Networks
  - Google, New York, November 2010
  - Wharton Marketing Seminar, Wharton, November 2007
  - Joint Statistics Meetings, Salt Lake City, July 2007
  - International Society for Business and Industrial Statistics, Azores, Portugal, August 2007
  - Marketing Science Institute, March 2007
  - Machine Learning Lunch, UPenn CS, November 2006
  - INFORMS, Pittsburgh, November 2006

- Network-based Marketing: Identifying Likely Adopters via Consumer Networks
  - Keynote: The Future of Advertising Conference, Copenhagen Denmark, 2012
  - Joint Statistical Meetings, Seattle, August 2006
  - Yahoo!, July 2006
  - ECML, Workshop on Practical Data Mining: Applications, Experiences and Challenges, Berlin, Germany, September 2006
  - Winter IS Conference 2006, University of Utah, March 2006
- Deriving Value from Consumer Networks: A Large Scale Viral Marketing Quasi-Experiment
  - Boston College, Carroll School of Management, December 2005
  - New York University, Stern School of Business, December 2005
  - Georgia Institute of Technology, College of Management, January 2006
  - University of Michigan, Ross School of Business, January 2006
  - University of Pennsylvania, The Wharton School, January 2006
  - University of Texas at Dallas, The School of Management, February 2006
  - Carnegie Melon University, Heinz School, February 2006
- A Vector Space Relational Model for Anonymous Identity Matching
  - JSM 2003, San Franscisco, CA.
  - Ph.D. Project Information Systems Doctoral Students Association, Tampa, FL., 2003

#### Academic Service

- Outreach: Heidelberg Laureate Forum (HLF) Reviewer 2015, 2016, 2017, 2018 Broadening Participation in Data Mining Panel (BPDM 2013), Ph.D. Project: I was one of three faculty advisors for the Ph.D. Project Information Systems Doctoral Student Association (ISDSA) from 2011-2014. I served as the President and Vice President of the Ph.D. Project's ISDSA and as a faculty member I have served each year on panels at the annual conference (2007-2015). Visiting faculty member at Addis Ababa University: Invited to teach doctoral seminar, July 2009 July 2013 (supported by the University of Addis Ababa and World Bank). CAARMS Presenter 2010. National Black MBA Association: NYC Chapter mentor for high school students supervised summer projects (2000–2005).
- Program Committees: CIST 2019 Co-Chair, CIST 2015 Co-Chair, SCECR 2015 Co-Chair, Associate Editor for European Conference on Information Systems (ECIS): 2014, WWW: 2013, 2014, 2017, ICWSM: 2018, ECML/PKDD: 2015, Workshop on Information Technologies and Systems (WITS): 2008, 2009, 2010, Knowledge Discovery and Data Mining (KDD) Industrial Track: 2008, 2009, 2010, 2011, 2013, 2014, 2015, 2016,2017 Associate Editor for International Conference on Information Systems (ICIS): 2009, 2011, 2012, 2013, 2014,2017 Data Co-Chair for Symposium on Artificial Intelligence for Development (AI-D): 2010, Workshop on Social Media Analytics (SOMA): 2010, 2012
- Referee: Associate Editor for Decision Sciences, Associate Editor for Special Issue on Big Data MISQ, Ad-hoc reviewer for Management Science, Information Systems Research, INFORMS Journal on Computing, International Journal of Forecasting, and Decision Support Systems
- Service@Microsoft: Director of MSR's Undergraduate Research Program 2016-present, TAPIA panelist 2016, Data Science Summer School (DS3) mentor 2016, BAM Mentorship Program for High School Students 2016, MSR Senior Leadership Team lab representative 2016 2017, Organizing events for students at Faculty Summit 2016, Co-chair of MSR Underrepresented Minorities (URM) Committee 2016 2017, MSR NYC Women's Lunch Organizer 2015-2016, Participated in the 7th annual TJ Symposium to Advance Research ("tjSTAR") at Thomas Jefferson High School for Science & Technology on June 9, 2015, Organizing BAM High School Day at MSR NYC, 2016, Azure ML Tutorial at SCECR 2016

- Service@Wharton: IDDEAS Program (2013), Rodin Faculty Panel (2013), Wharton Women Reception (2013), Moderator, Wharton Africa Conference (2011), Ph.D. Admissions Committee (2009–2011), OPIM Seminar Committee (2008, 2012), Panelist EMTM 20th Anniversary (2009), Ph.D. Project representative and panelist (2008–2010), Iron Prof Competition (2010), EMTM lecture (2011), Whitney M. Young Jr. Memorial Conference Master Class Instructor (2011), Wharton Faculty International Seminar to Africa (2011), Proposal for OPIM Business Analytics Track (accepted January 2011)
- Doctoral Students: Post-doc advisor for Jia Liu at MSR, Co-advisor for Getachew Berhan (University of Addis Ababa, IS 2013, with Tsegaye Tadesse of University of Nebraska), thesis committee member for Jia Liu (Columbia, Marketing 2017 (expected)) Alexy Khrabrov (UPENN, CS 2011), and Daniel Fleder (UPENN, OPIM 2009)

#### Selected Press Mentions

- Schoeniger, E. The second screen goes mainstream. *Wall Street Journal* (2013). http://cadwaladercommunications.com/wsj-second-screen.pdf
- Kim, Q. Can chatter on twitter boost tv ratings? *Marketplace* (2013). http://www.marketplace.org/topics/tech/can-chatter-twitter-boost-tv-ratings
- Brenker, A. The social media strategy for tv in 2013. *Examiner.com* (2013). http://www.examiner.com/article/the-social-media-strategy-for-tv-2013?cid=rss
- Wauters, R. As the social TV industry comes of age, stay tuned for what facebook has in store.
   The Next Web (2013). http://thenextweb.com/facebook/2013/02/09/facebook-social-tv-checkin-feature/#!pLTsI
- Denison, D. Should you start a big data project? *Acquia* (2013). http://www.acquia.com/blog/should-you-start-big-data-project
- Keslar, L. On the trail of drug risks. *proto* (2013). http://protomag.com/assets/on-the-trail-of-drug-risks?page=3
- Beck, M. Researchers tune in to the internet buzz. *Wall Street Journal* (Feb. 14, 2013 2012). http://online.wsj.com/news/articles/SB10001424052702303404704577309794125038010
- Gaskell, A. Nielson and twitter establish social TV ratings. *Technorati* (2012). http://technorati.com/entertainment/tv/article/nielson-and-twitter-establish-social-tv/
- Hill, S. Social TV: Linking content, buzz and sales. *Google Think* (2012). http://www.google.com/think/columns/social-tv.html
- Kuehner-Hebert, K. Cover story: Are you ready for big data? *Target Marketing* (2012). http://www.targetmarketingmag.com/article/big-data-test-extreme-customer-insights-revealed/1#
- Collins, N. Penn research team raises cardiac arrest awareness. *The Daily Pennsylvanian* (2012). http://www.thedp.com/index.php/article/2012/05/penn\_research\_team\_raises\_cardiac\_arrest\_awareness
- FINKEL, R. New wharton initiative to focus on consumer analytics. *The Daily Pennsylvanian* (2011). http://www.thedp.com/index.php/article/2011/01/new\_wharton\_initiative\_to\_focus\_on\_consumer\_analytics
- Hoffmann, L. Data optimization in developing nations. *Communications of the ACM* (2011). http://dl.acm.org/citation.cfm?id=1941495
- Kunz, B. Go ahead, facebook. sell that data. *Bloomberg Businessweek* (2010). http://www.businessweek.com/technology/content/may2010/tc20100526\_720314.htm
- CLIFFORD, S. The online ad that knows where your friends shop. *Wall Street Journal* (2009). http://www.nytimes.com/2009/06/26/business/media/26adco.html?\_r=0
- Lemm, K. Im fadenkreuz der netzwerk-werber. *stern.de* (2008). http://www.stern.de/digital/online/daten-zu-verkaufen-im-fadenkreuz-der-netzwerk-werber-619367.html

# **Selected Journal Impact Factors**

Journal Name	Year Published	Impact Factor <sup>1</sup>
Management Information Systems Quarterly http://www.misq.org/	2016	5.311
American Heart Journal http://www.ahjonline.com/	2015	4.463
American Journal of Public Health http://ajph.aphapublications.org	2014	3.930
IEEE Transactions on Geoscience and Remote Sensing (TGRS) http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=36	2013	3.467
Journal of General Internal Medicine http://www.springer.com/medicine/internal/journal/11606	2013	3.278
Emergency Medicine Journal http://emj.bmj.com/	2013	1.645
Circulation: Cardiovascular Quality and Outcomes http://pubget.com/journal/1941-7705/circulation-cardiovascular-quality-and-outcomes	2013	4.840
Pharmacoepidemiology and Drug Safety http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099- 1557/issues?activeYear=2013	2013	2.897
Resuscitation http://www.journals.elsevier.com/resuscitation/	2013	4.104
Bioinformatics http://www.medical-journals-links.com/bioinformatics-medical- informatics-journals.php	2012	5.468
BMC Bioinformatics http://www.medical-journals-links.com/bioinformatics-medical-informatics-journals.php	2011	2.751
Journal of Biomedical Informatics http://www.journals.elsevier.com/journal-of-biomedical-informatics/	2011	2.151
Journal of Medical Internet Research http://www.medical-journals-links.com/bioinformatics-medical- informatics-journals.php	2011	4.409
International Journal of Electronic Commerce http://www.ijec-web.org/	2011	1.550
Journal of Computational & Graphical Statistics http://www.tandfonline.com/toc/ucgs20/current.UtYCuBYeW-I	2006	1.32
Statistical Science http://www.imstat.org/sts/	2006	1.531
IEEE Transactions on Knowledge and Data Engineering (TKDE) http://www.computer.org/portal/web/tkde/about	2005	1.758

<sup>&</sup>lt;sup>1</sup>The impact factors are taken from either Thomson Reuters or the journal web page.

# **Grant Activity**

## Awarded Research Grants

Name	Funding Agency	Period	Type	Role	Total Award
Twitter and Cardiovascular Health	NIH	2015- 2017	Externa	l Collab.§	\$2,000,000
Using Social Media in TV and Radio Commercials to Drive Online Engagement and Product Sales in South Africa	Global Initiatives Research Program	2014	Internal	PI	\$17,500
Using the Language of Social Media to Predict Disease Severity and Health Care Utilization	LDI Pilot Program	2013	Internal	Co-PI	\$20,000
Education Coursework Grant	Amazon Web Services	2014	Externa	l PI	\$12,500
Public Health and Public Art	LDI Pilot Program	2013	Internal	Collab.	\$20,000
Education Coursework Grant	Amazon Web Services	2013	Externa	l PI	\$10,100
Using Novel Media Technology to Improve Cardiovascular Health	American Heart Association	2012	Externa	l Collab.	\$66,000
Privacy Preserving Social Network Strategies	Wharton Customer Analytics Initiative	2011	Internal	PI	\$2,500
De-Anonymization in Social Networks	Wharton Junior Faculty Dean's Research Fund	2011	Internal	PI	\$25,000
Data Driven Analysis in Ethiopia	Wharton Global Initia- tives	2009	Internal	PI	\$1,500
Collective Inference for Online Advertising	Google and WPP Mar- keting	2010-14	Externa	l PI	\$80,000
Mining Internet Conversations for Evidence of Herbal Association	NIH	2010-12	Externa	l Co-PI	\$496,998
Effective Matching in Dynamic Networks	Office of Naval Research	2008-14	Externa	l Co-PI	\$7,500,000