

VIVEK K. SINGH

4 Huntington Street,
New Brunswick, NJ 08901
Phone: 848 932 7588

vivek.k.singh@rutgers.edu

<http://wp.comminfo.rutgers.edu/vsingh>

RUTGERS UNIVERSITY

New Brunswick, NJ

Assistant Professor (tenure-track), Department of Library and Information Science.

Sep 2014- current

Member of Graduate Faculty, Department of Electrical and Computer Engineering.

Associate Member of Graduate Faculty, Department of Computer Science.

Director, Behavioral Informatics Lab.

- Teaching areas: Data Analytics, Social Media, Social Informatics, and Foundations of Data Science.
- Research interests: Computational Social Science, Multimedia Information Systems, Data Analytics.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge, MA

Visiting Professor, Media Lab

Sep 2014 – Aug 2018

Research Affiliate, Media Lab

Mar 2019- current

- This is a 5% time unpaid appointment to allow for collaborative research on understanding human behavior using social, behavioral, 'big' data.

PROFESSIONAL PREPARATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge, MA

Post-Doctoral Associate, Human Dynamics Group, MIT Media Lab

Sep 2012-Aug 2014

- Research Focus: Understanding and influencing human behavior using social, behavioral, 'big' data. (Mentor: Professor Alex 'Sandy' Pentland)
- Research Interests: Social Reality Mining, Computational Social Science, Personal Data Analytics.

UNIVERSITY OF CALIFORNIA, IRVINE

Irvine, CA

Ph. D., Information and Computer Science

2007-2012

- Thesis Topic: "Personalized Situation Recognition" (Advisor: Professor Ramesh Jain)
- Research Interests: Personalized Decision Systems, Multimedia Systems, Social Media.

NATIONAL UNIVERSITY OF SINGAPORE

Singapore

Master of Computing, Computer Science

2003-2005

Bachelor of Engineering, Computer Engineering

1998-2002

- Master's Thesis: "Cooperative Multi-camera Surveillance using Model Predictive Control".
- Fully sponsored for undergraduate studies under the SIA-NOL scholarship. (One of ~30 candidates selected from over 8,000 applicants nation-wide in India).

AWARDS AND ACHIEVEMENTS

- **Honorable Mention** (Social Integration category), [The Data For Refugees Challenge](#), which aimed to present solutions for the problems of Syrian refugees in Turkey. Organized by Türk Telekom, Boğaziçi University and TÜBİTAK, with support of UNICEF, UNHCR and the International Organization for Migration, 2018.
- **Distinguished Achievement in Research** Award, Library and Information Science Department, Rutgers University, 2015.
- Selected as a “**Rising Star**” speaker by ACM SIG Multimedia (one out of 12 selected worldwide- details [here](#)), 2015.
- **1st prize** for predicting crime patterns in London in **Datathon on “Big Data for Social Good”** organized by O₂, MIT, Telefonica and Open Data Institute, at Campus Party, London, Sep 2013.
- Selected as an “**Emerging Leader in Multimedia Research**”, by *IBM Research Labs, NY*. One of 10 selected worldwide in 2009.
- **Best Paper Award** at ACM Workshop on Social Media (WSM 2009) co-located with ACM Multimedia Conference.
- **Best Student Paper** at IEEE Workshop on Situation Management (SIMA 2009), co-located with IEEE Military Communications conference.

RESEARCH GRANTS

EXTERNAL

- National Science Foundation, Student Travel Support for the 26th ACM International Conference on Multimedia 2018 (ACM MM 2018), Role: (Single) PI, 2018-2019. \$15,543.00
- National Science Foundation, CRII: CHS: Cyberbullying Detection Using Content and Social Network Analysis, Role: (Single) PI, 2015-2019. \$174,248.00.
- National Science Foundation, CRII: CHS: Cyberbullying Detection Using Content and Social Network Analysis, Role: (Single) PI, 2017-2019 (Research Experience for Undergraduates Supplement). \$14,100.00.
- Google Research Award, Predicting Search Behavior Using Physical and Online Explorations, Role; Co-PI, PI: Chirag Shah, 2016, \$62,813.00.

INTERNAL

- Rutgers Office for Research and Economic Development (ORED) Interdisciplinary Research Group (IRG), Human Centered Design with Communities for Individual and Population Health. Role: Co-PI, PIs: Mark Aakhus and Sarah Allred, 2018-2019, \$200,000.00.
- Rutgers Community Design for Health and Wellness Interdisciplinary Research Group Funding, Towards Fairness in Mental Health Prediction Apps, Role: Co-PI, PI: Kaitlin Costello, 2019-2019, \$18,000.00.
- Rutgers SC&I Grants for Individual Faculty Research, Gender Bias in the Voices of Smart Home Devices, Role: PI, 2019-2019, \$4,000.00.
- Rutgers SC&I Research Development Grant, Reimagining Mobile Phones as Cooperation Catalysts, Role: (Single) PI, 2018-2018. \$3,000.00.
- Rutgers SC&I Research Development Grant, Designing Nudges for Mobile Information Privacy, Role: (Single) PI, 2017-2017. \$3,400.00.
- Rutgers SC&I Research Development Grant, Real-time Diversity Analytics, Role: (Single) PI, 2016-2016. \$3,500.00.
- SCI Research Development Grant, Predicting User Well-being via Socio-Mobile data, Role: (Single) PI, 2015-2015. \$7,500.00.

RESEARCH STUDENT SUPERVISION

PhD DISSERTATION COMMITTEES

- **Committee Chair (Primary Advisor):**

- Ghassan Bati (Rutgers ECE); defended: Fall 2018. Dissertation Title: “*Phonotypic Modeling of Human Behaviors and Propensities.*”
- Isha Ghosh (Rutgers LIS); advancement to candidacy: Fall 2018
- Jamal Alasadi (Rutgers ECE); advancement to candidacy: expected Spring 2019
- Daniel Houli (Rutgers LIS); ongoing.

- **Committee Member:**

- Dongho Choi (Rutgers LIS): defended: Fall 2016
- Teis Kristensen (Rutgers Communication): proposal defended: Spring 2018
- Manasa Rath (Rutgers LIS): proposal defended: Fall 2018
- Soumik Mandal (Rutgers LIS): advancement to candidacy: Fall 2018
- Eun Baik (Rutgers LIS): proposal defended: Fall 2017

Masters-Level Research

- **MS thesis supervision**

- Saket Hegde (MS thesis, Rutgers ECE): defended Fall 2017

- **Other master’s level research**

- Erick Rivera (Independent Study, Rutgers MI), 2018
- Vinayak Nayak (Independent Study, Rutgers MBS), 2018
- Amirtha Sridharan (Independent Study, Rutgers MBS), 2018
- Joshua Rochette (Independent Study, Rutgers MI), 2017
- Isha Ghosh (Capstone Project, Rutgers MCIS), 2016
- Priya Subramanian (Independent Study, Rutgers MBS), 2015

- **MS thesis committee member:**

- Ashish Tripathi (U. Winnipeg, CS): defended Fall 2015
- Abukari Yakubu (U. Winnipeg, CS): defended Fall 2015
- Qianjia Huang (U. Winnipeg, CS): defended Fall 2014

Undergraduate Researchers

- Connor Hofenbitzer (Rutgers): research assistant (NSF REU), 2018-2019
- Rishab Chawla (Rutgers): research assistant (NSF REU), 2018
- Akansha Atrey (SUNY Albany): volunteer research assistant, 2017-2018
- Devin Soni (Rutgers): volunteer research assistant, 2016-2018
- Shenghao Wu (Columbia): volunteer research assistant, 2016-2018
- Arushi Jain (Indian Institute of Technology, Kanpur): volunteer research assistant, 2016
- Suril Dalal (Rutgers): ITI independent study, 2015
- Sneha Dasari (Rutgers): ITI independent study, 2015
- Ariana Blake (Rutgers): ITI independent study, 2015
- Rishav Raj Agarwal (Indian Institute of Technology, Kanpur): summer research intern, 2015
- Connor Hofenbitzer (Rutgers): research assistant (NSF REU), 2018-2019

High School Student Researchers

- Aarushi Srivastava (South Brunswick High School, Monmouth Junction, NJ): research assistant 2017-2018

TEACHING

Teaching at Rutgers University:

2014-current

- Courses revised and revamped:
 - Understanding, Building, and Designing Social Media (MI/PhD)
 - Fundamentals of Data Science (ITI/MI)
- Classes taught (see table below for the list and the student evaluations):

- COURSE INFORMATION -			- COURSE EVALUATION -					
			Evaluation Responses		Teaching Effectiveness (Max = 5)		Course Quality (Max = 5)	
SsYr	Course Title	Level	Instructor	Dept Mean	Instructor	Dept Mean		
Fa17	Data Analytics for Information Professionals	ITI	4.38	4.19	4.23	4.06		
Fa17	Data Analytics	MI	4.45	4.42	4.35	4.30		
Sp17	Data Analytics	MI	4.73	4.32	4.80	4.25		
Sp17	⁵ Topics Lib & Info Sci I (Understanding, Building, and Designing Social Media)	PhD	5.00	4.52	4.00	4.49		
Sp17	⁵ Understanding, Building, and Designing Social Media	MI	4.80	4.32	4.80	4.32		
Fa16	Data Analytics	MI	4.36	4.29	4.18	4.16		
Fa16	⁴ Fundamentals of Data Science	MI	4.53	4.29	4.40	4.16		
Fa16	⁴ Topics Info Technology (Fundamentals of Data Science)	ITI	4.86	4.05	4.86	4.05		
Fa15	³ Data Analytics	MI	3.89	4.32	3.89	4.21		
Fa15	³ Data Analytics	ITI	4.55	4.06	4.64	3.97		
Fa15	Social Informatics	ITI	4.33	4.06	4.32	3.97		
Sp15	² Data Analytics	MI	4.50	4.31	4.60	4.27		
Sp15	² Data Analytics	ITI	4.57	4.16	4.29	4.13		
Fa14	¹ Special Topics V (Data Analytics)	MI	4.57	4.27	4.57	4.25		
Fa14	¹ Topics Info Technology (Data Analytics)	ITI	4.60	4.11	4.70	4.07		

Teaching at Institute of Technical Education, Singapore

2002-2006

- Four years of full-time teaching experience as a Lecturer. Classes taught (at post-secondary education level) included Web Programming, Multimedia Production, and Database Systems. Duties included developing the curriculum, delivering lectures, leading laboratory sessions, and mentoring students on various internal and external projects.

SERVICE

- **Professional Organizations:**
 - Chair-Elect, ASIS&T Special Interest Group, SIG-Social Media, 2018-2019
- **Conference/Workshop Organization:**
 - Grand Challenge Co-Chair, ACM Multimedia 2019
 - Program Committee Co-Chair: IEEE International Conference on Multimedia Big Data, 2019
 - Student Travel Grant Co-Chair, ACM Multimedia 2018
 - Best Paper Selection Committee, ACM CSCW 2018 (Online first round of submissions)
 - Doctoral Consortium Co-Chair, ACM CHIIR, 2018
 - Tutorials Co-Chair: ACM Multimedia, 2017

- Panels Co-Chair: ACM/IEE International Conference on Digital Libraries, 2016; ACM International Conference on Multimedia, 2017
- *TPC Area Co-Chair*: ACM International Conference on Multimedia, Area: Big and Broad Multimedia, 2014, Orlando, Florida, USA.
- *General Co-Chair*: First ACM Workshop on ‘Personal Data Meets Distributed Multimedia’, co-located with ACM Multimedia Conference, Oct 2013, Barcelona, Spain.
- *Co-organizer*: Temporal Networks, Human Dynamics and Social Physics NetSci'14 Symposium, Berkeley California, June 2-6 2014
- **Book/Journal Editing:**
 - Journal *Guest Co-Editor*: IEEE Multimedia Special Issue: *New Signals in Multimedia Systems and Applications*, 2018;
 - Journal *Guest Co-Editor*: IEEE Internet Computing Special Issue: Physical-Cyber-Social Computing, June, 2015;
 - Journal *Guest Co-Editor*: IEEE Transactions on Internet Technology, Special Issue: Foundations of Social Computing: Dec 2016.
- **Program Committee membership:**
 - ACM CSCW Conference (Associate Chair), 2016, 2017, 2018, 2019
 - ACM CHI Conference (Associate Chair), 2019
 - iConference (Associate Chair), 2019
 - ACM Multimedia Conference, 2013, 2014, 2015, 2016, 2017, 2018
 - IEEE International Conference on Multimedia and Expo, 2015, 2016.
 - ACM International Conference on Multimedia Retrieval, 2016, 2019
 - ACM Web Science Conference, 2016
- **Reviewing for Journals:**
 - Proceedings of the IEEE,
 - IEEE Transactions on Multimedia,
 - ACM Transactions on Multimedia Computing, Communications and Applications,
 - Multimedia Tools and Applications,
 - IEEE Transactions on Services Computing,
 - Cambridge Network Science,
 - Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies,
 - Proceedings of the ACM on Human Computer Interaction (CSCW)
 - Human Computer Interaction Journal
 - Journal of the Association for Information Science and Technology (JASIST)
- **Reviewing for research grant proposals:**
 - Panel reviewer for National Science Foundation: 2015, 2016, 2017, 2018
 - External Reviewer for the Natural Sciences and Engineering Research Council of Canada, 2016-2017.
 - External reviewer for the National Science Foundation: 2013.
- **Rutgers School of Communication and Information (SC&I) committees**
 - Faculty Secretary: 2018-2019
 - Member, SC&I Research Development Committee: 2014-2015
- **Rutgers Library and Information Science department committees**

- Coordinator: Data Science concentration for the MI program: 2018-2019
- Member, Department Hiring Committee, 2018-2019
- Member, ALA accreditation task force: Standards team: 2017-2018
- Member: PhD curriculum review committee: 2017-2018
- Chair, LIS Research Development Committee and Coordinator- LIS Speaker Series: 2015-2016
- Member, LIS Research Development Committee: 2014-2015
- **Community Engagement**
 - Invited Speaker: Highland Park High School, NJ. Introductory lecture to 200 high-school students on online privacy management and cyberbullying prevention, 2015.

PUBLICATIONS

Total Citations: 1506

H-Index: 23

(As per Google Scholar on March 27, 2019)

Authored and Edited Books

1. **Singh, V.K.**, & Jain, R., *Situation Recognition Using EventShop* (co-authored monograph), Springer, pp. 1-150, ISBN: 978-3-319-30535-6 / 3319305352 (Published: June 2016.)
2. Bozkaya, B., & **Singh, V.K.** *Geo-Intelligence and Visualization through Big Data Trends* (edited book). Hershey, PA: IGI Global. doi 10.4018/978-1-4666-8465-2, pp. 1-349, 2015

Journals Articles: Published or Accepted¹

1. **Bati, G.^{g1}**, & **Singh, V.K.** (2018). Altruistics: Inferring Altruism Propensity Based on Mobile Phone Use Patterns. *IEEE Transactions on Big Data*. Early Access: DOI: 10.1109/TBDDATA.2018.2873346
2. **Ghosh, I.^g**, & **Singh, V.K.** (2018), Phones, Privacy, and Predictions: A study of phone logged data to predict privacy attitudes of individuals. *Online Information Review*. <https://doi.org/10.1108/OIR-03-2018-0112>.
3. **Soni, D.^u**, & **Singh, V.K.** (2018), See No Evil, Hear No Evil: Audio-Visual-Textual Cyberbullying Detection, *Proceedings of the ACM Human-Computer Interact.* 2, CSCW, Article 164, 2018.
4. **Huang, Q.^g**, **Singh, V. K.**, & Atrey, P. K. (2018). On cyberbullying incidents and underlying online social relationships. *Journal of Computational Social Science*, 1-20. 1: 241. <https://doi.org/10.1007/s42001-018-0026-9>
5. **Singh, V.K.**, **Goyal, R.^g**, & **Wu, S.^u** (2018), Riskalyzer: Inferring Individual Risk-Taking Propensity Using Phone Metadata. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*, 2(1), 34.
6. **Agarwal, R.^u**, Lin, C.C., Chen, K.T., & **Singh, V.K.**, (2018) Predicting financial trouble using call data - on social capital, phone logs, and financial trouble. *PloS ONE* 13(2), e0191863.
7. Dong, X., Suhara, Y., Bozkaya, B., **Singh, V. K.**, Lepri, B. & Pentland, A. (2018) Social Bridges in Community Purchase Behavior, *ACM Transactions on Intelligent Systems and Technology (TIST)*, Volume 9 Issue 3, February 2018 Article No. 33
8. **Singh, V.K.** & **Ghosh, I.^g** (2017), Inferring Individual Social Capital Automatically via Phone Logs. *Proceedings of the ACM Human-Computer Interact.* 1, CSCW, Article 95 (December 2017), 12 pages. DOI: <https://doi.org/10.1145/3134730>

^{1 g} indicates that the author is a *graduate* student supervised by Vivek Singh

^u indicates that the author is a *undergraduate* student supervised by Vivek Singh

9. **Singh, V. K.**, Fernandes, D., Kankanhalli, M., & Haenselmann, T. (2016). Decoupled Multicamera Sensing for Flexible View Generation. *Journal of Sensors*, 501, 8137859.
10. Almaatouq, A., Shmueli, E., Nouh, M., Alabdulkareem, A., **Singh, V. K.**, Alsaleh, M., Alarifi, A., Alfaris, A. & Pentland, A. (2016). If it looks like a spammer and behaves like a spammer, it must be a spammer: analysis and detection of microblogging spam accounts. *International Journal of Information Security*, 15:475, 1-17. <https://doi.org/10.1007/s10207-016-0321-5>
11. de Montjoye, Y. A., Radaelli, L., **Singh, V. K.**, & Pentland, A. (2015). Unique in the shopping mall: On the reidentifiability of credit card metadata. *Science*, 347(6221), 536-539.
12. **Singh, V. K.**, Bozkaya, B., & Pentland, A. (2015). Money Walks: Implicit Mobility Behavior and Financial Well-Being. *PloS one*, 10(8), e0136628.
13. **Singh, V. K.**, Mani, A., & Pentland, A. (2014). Social Persuasion in Online and Physical Networks. *Proceedings of the IEEE*, 102(12), 1903-1910.
14. Shmueli, E., **Singh, V. K.**, Lepri, B., & Pentland, A. (2014). Sensing, Understanding, and Shaping Social Behavior. *Computational Social Systems, IEEE Transactions on*, 1(1), 22-34.
15. **Singh, V. K.**, Freeman, L., Lepri, B., & Pentland, A. S. (2013). Classifying spending behavior using socio-mobile data. *HUMAN*, 2(2), pp-99.
16. **Singh, V. K.**, Pirsivash, H., Rishabh, I., & Jain, R. (2009). Towards environment-to-environment (e2e) multimedia communication systems. *Multimedia Tools and Applications*, 44(3), 361-388.
17. **Singh, V. K.**, Atrey, P. K., & Kankanhalli, M. S. (2008). Coopetitive multi-camera surveillance using model predictive control. *Machine Vision and applications*, 19(5-6), 375-393.
18. **Singh, V. K.**, & Kankanhalli, M. S. (2009). Adversary aware surveillance systems. *Information Forensics and Security, IEEE Transactions on*, 4(3), 552-563.

Journals Guest Editorials

1. Cesar, P., **Singh, V.**, Jain, R., Sebe, N., & Oliver, N. (2018). New Signals in Multimedia Systems and Applications. *IEEE MultiMedia*, (1), 12-13.
2. Chopra, A.K., Shmueli, E., and **Singh, V.K.** 2017. Introduction to the Special Issue on Advances in Social Computing. *ACM Trans. Internet Technol.* 17, 2, Article 11 (May 2017), 2 pages. DOI: <https://doi.org/10.1145/3080258>
3. Barnaghi, P., Sheth, A., **Singh, V.**, & Hauswirth, M. (2015). Physical-Cyber-Social Computing: Looking Back, Looking Forward. *Internet Computing, IEEE*, 19(3), 7-11.

Book Chapters

1. **Singh, V.** (2017). Situation recognition using multimodal data. In *Frontiers of Multimedia Research* (pp. 159-189). Editor: Chang, S.F. Association for Computing Machinery and Morgan & Claypool.
2. Srivastav, K.A., **Singh, V. K.**, Bozkaya, B., & Pentland, A. (2015). Assessing Financial Wellbeing of Merchants by Analyzing Behavioral Patterns in Historical Transactions in Geo-Intelligence and Visualization through Big Data Trends, pp. (76-93), IGI Global, PA.
3. **Singh, V. K.**, Jain, R., & Kankanhalli, M. (2011). Mechanism design for incentivizing social media contributions. In *Social media modeling and computing* (pp. 121-143). Springer London.

International Peer-Reviewed Conferences: Proceedings Published ²

(Subset based on the following criteria: 6-12 pages, double column format, and acceptance rate between 9% and 29%.)

1. **Bati, G.[§]**, & **Singh, V.K.** (2018). "Trust Us": Mobile Phone Use Patterns Can Predict Individual Trust Propensity. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 14 pages. ACM. [Acceptance Rate: 25.7%]
2. **Singh, V. K.**, **Atrey, A.^u**, & **Hegde, S.[§]** (2017). Do Individuals Smile More in Diverse Social Company? Studying Smiles and Diversity Via Social Media Photos. (Brave New Ideas track) In *Proceedings of the 25th ACM international conference on Multimedia*. ACM. [Acceptance Rate: 29%]
3. **Singh, V. K.**, & **Agarwal, R. R.^u** (2016, September). Cooperative *phoneotypes*: exploring phone-based behavioral markers of cooperation. In *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing* (pp. 646-657). ACM. [Acceptance Rate: 23.9%]
4. Choi, D., Shah, C., & **Singh, V.** (2016, September). Probing the interconnections between geo-exploration and information exploration behavior. In *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing* (pp. 1170-1175). ACM. [Acceptance Rate: 23.9%]
5. Almaatouq, A., Alabdulkareem, A., Nouh, M., Shmueli, E., Alsaleh, M., **Singh, V. K.**, Alarifi, A., Alfaris, A., & Pentland, A. S. (2014, June). Twitter: who gets caught? Observed trends in social micro-blogging spam. In *Proceedings of the 2014 ACM conference on Web science* (pp. 33-41). ACM. [Acceptance Rate: 20.1%]
6. **Singh, V. K.**, Freeman, L., Lepri, B., & Pentland, A. S. (2013, September). Predicting spending behavior using socio-mobile features. In *Social Computing (SocialCom), 2013 International Conference on* (pp. 174-179). IEEE. [Acceptance Rate: 9.9%]
7. **Singh, V. K.**, Gao, M., & Jain, R. (2012, October). Situation recognition: an evolving problem for heterogeneous dynamic big multimedia data. In *Proceedings of the 20th ACM international conference on Multimedia* (pp. 1209-1218). ACM. [Acceptance Rate: 20.2%]
8. **Singh, V. K.**, Luo, J., Joshi, D., Lei, P., Das, M., & Stubler, P. (2011, November). Reliving on demand: a total viewer experience. In *Proceedings of the 19th ACM international conference on Multimedia* (pp. 333-342). ACM. [Acceptance Rate: 17.3%]
9. **Singh, V. K.**, Gao, M., & Jain, R. (2010, October). Social pixels: genesis and evaluation. In *Proceedings of the international conference on Multimedia* (pp. 481-490). ACM. [Acceptance Rate: 17.0%]

Other international Peer- Reviewed Conferences and Workshops: Proceedings Published¹

10. **Soni, D.^u**, & **Singh, V. K.** (2018). Time Reveals all Wounds: Modeling Temporal Dynamics of Cyberbullying Sessions. In *Proceedings of the Eleventh International AAI Conference on Web and Social Media (ICWSM 2018)* (pp. 684-687) [Acceptance Rate: 25%]
11. **Singh, V. K.**, & **Long, T.[§]** (2018). Automatic Assessment of Mental Health Using Phone Metadata, In *Proceedings of the Association for Information Science and Technology*. <https://doi.org/10.1002/pr2.2018.14505501049>, Length: 10 pages. [Acceptance Rate: 49%]
12. **Ghosh, I.[§]** & **Singh, V. K.** (2018). Modeling Social Support Scores Using Phone Use Patterns, In *Proceedings of the Association for Information Science and Technology*. <https://doi.org/10.1002/pr2.2018.14505501015>, Length: 10 pages. [Acceptance Rate: 49%]
13. **Singh, V. K.**, **Hegde, S.[§]**, & **Atrey, A.^u** (2017). Towards Measuring Fine-Grained Diversity Using Social Media Photographs. In *Proceedings of the Eleventh International AAI Conference on Web and Social Media (ICWSM 2017)* (pp. 668-671). [Acceptance Rate: 19%]

14. **Singh, V. K., & Jain, A.^u** (2017, May). Toward Harmonizing Self-reported and Logged Social Data for Understanding Human Behavior. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems* (pp. 2233-2238). ACM. [Acceptance Rate: 25%]
15. **Singh, V. K., Ghosh, S.^g, & Jose, C.^g** (2017, May). Toward Multimodal Cyberbullying Detection. In *Proc. of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 2090-2099). ACM. [Acceptance Rate: 38%]
16. **Singh, V. K.,** Radford, M. L., **Huang, Q.^g**, & Furrer, S. (2017, February). "They basically like destroyed the school one day": On Newer App Features and Cyberbullying in Schools. In *In Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW)* (pp. 1210-1216). [Acceptance Rate: 34.5% under a revise and resubmit model]
17. Choi, D., Shah, C., & **Singh, V.** (2016). Which team benefits from collaboration?: Investigating collaborative information seeking using personal and social contextual signals. In *Proceedings of the Association for Information Science and Technology*, 53(1), 1-6.
18. **Singh, V.K., Huang, Q.^g**, and Atrey, P. (2016), Automated Cyberbullying Detection Using Probabilistic Socio-Textual Information, *ACM/IEEE International Conference on Advances in Social Networks Analysis and Mining*, (pp. 474-478).
19. Huang, Q., **Singh, V. K.,** & Atrey, P. K. (2014, November). Cyber Bullying Detection Using Social and Textual Analysis. In *Proceedings of the 3rd International Workshop on Socially-Aware Multimedia* (pp. 3-6). ACM.
20. Pongpaichet, S., **Singh, V. K.,** Jain, R., & Pentland, A. P. (2013). Situation fencing: making geo-fencing personal and dynamic. In *Workshop on Personal Data Meets Distributed Multimedia* (pp. 3-10), ACM.
21. **Singh, V. K.** (2011, November). From multimedia data to situation detection. In *Proceedings of the 19th ACM international conference on Multimedia* (pp. 875-876). ACM.
22. R. Jain, **V.K. Singh**, and M. Gao, (2011) Social Life Networks, *In Proceedings of the WWW Workshop on Social Media Engagement*.
23. Gao, M., **Singh, V. K.,** & Jain, R. (2012, June). Eventshop: from heterogeneous web streams to personalized situation detection and control. In *Proceedings of the 4th Annual ACM Web Science Conference* (pp. 105-108). ACM.
24. **Singh, V. K.,** & Jain, R. (2010, April). Structural analysis of the emerging event-web. In *Proceedings of the 19th international conference on World wide web* (pp. 1183-1184). ACM.
25. **Singh, V. K.,** Jain, R., & Kankanhalli, M. S. (2009, October). Motivating contributors in social media networks. In *Proceedings of the first SIGMM workshop on Social media* (pp. 11-18). ACM. **(Best Paper Award)**
26. **Singh, V. K.,** & Jain, R. (2009, October). Situation based control for cyber-physical environments. In *Military Communications Conference, 2009. MILCOM 2009. IEEE* (pp. 1-7). IEEE. **(Best Student Paper)**
27. Saini, M. K., **Singh, V. K.,** Jain, R. C., & Kankanhalli, M. S. (2008, October). Multimodal observation systems. In *Proceedings of the 16th ACM international conference on Multimedia* (pp. 933-936). ACM. [Acceptance Rate: 33.0%]
28. **Singh, V. K.,** Pirsivash, H., Rishabh, I., & Jain, R. (2008, October). Towards environment-to-environment (e2e) multimedia communication systems. In *Proc. of the 1st ACM Int. workshop on Semantic ambient media experiences*. (pp. 31-40). ACM.
29. **Singh, V. K.,** & Kankanhalli, M. S. (2007, July). Towards adversary aware surveillance systems. In *Multimedia and Expo, 2007 IEEE International Conference on* (pp. 2038-2041). IEEE. [Acceptance Rate: 45.0%]
30. **Singh, V. K.,** Atrey, P. K., & Kankanhalli, M. S. (2006). Coopetitive multimedia surveillance. In *Advances in Multimedia Modeling* (pp. 343-352). Springer Berlin Heidelberg.

31. Ram, S., Ramakrishnan, K. R., Atrey, P. K., **Singh, V. K.**, & Kankanhalli, M. S. (2006, October). A design methodology for selection and placement of sensors in multimedia surveillance systems. In *Proc. ACM international workshop on Video surveillance and sensor networks* (pp. 121-130). ACM

PATENTS

- Lou, J., Joshi, D., Stubler, P., Das, M., Lei, P. & **Singh, V.K.** *Method for Media Reliving Playback*, U.S. Patent No. 8879890: Issued November 4, 2014.
- Lou, J., Joshi, D., Stubler, P., Das, M., Lei, P. & **Singh, V.K.** *Method for media reliving on demand*, U.S. Patent No. US 908245: Issued July 14, 2015

INVITED TALKS

- *Sensing, Understanding, and Shaping Human Behavior*, Center for Informatics Research in Science and Scholarship, University of Illinois, Urbana Champaign, 2019
- *Behavioral Informatics*, Connective Media Seminar, CornellTech, NYC, 2019.
- *Sensing and Shaping Human Behavior*, Building the Future: New Technological Frontiers in Cities Conference, Princeton University, 2019.
- **Keynote Talk:** *Sensing, Understanding, and Shaping Human Behavior*, ACM International Workshop on Computational Models of Social Interactions: Human-Computer-Media Communication, co-located with ACM Multimedia Conference, Brisbane, Australia, 2015.
- *Sensing, Understanding, and Shaping Human Behavior*, Human Dynamics Group Seminar, MIT Media Lab, Cambridge, MA, 2015.
- *Sensing, Understanding, and Shaping Human Behavior*, 5th International Workshop on Cyber-Physical Cloud Computing, National Institute on Standards and Technology, 2015.
- *Sensing, Understanding, and Shaping Human Behavior*, Bay Area Multimedia Forum, Stanford, CA, 2014.

MEDIA COVERAGE OF RESEARCH ACTIVITIES

- New York Times, With a Few Bits of Data, Researchers Identify ‘Anonymous’ People, <http://bits.blogs.nytimes.com/2015/01/29/with-a-few-bits-of-data-researchers-identify-anonymous-people/>, 2015
- BBC News, Mobile location data 'present anonymity risk', <http://www.bbc.com/news/science-environment-21923360>, 2015.
- Wall Street Journal, Metadata Can Expose Person’s Identity Even Without Name, <http://www.wsj.com/articles/metadata-can-expose-persons-identity-even-when-name-isnt-1422558349>, 2015
- Nature News, People identified through credit-card use alone, <http://www.nature.com/news/people-identified-through-credit-card-use-alone-1.16817>

- Harvard Business Review, There's No Such Thing as Anonymous Data, <https://hbr.org/2015/02/theres-no-such-thing-as-anonymous-data>, 2015
- More coverage: [MIT Technology Review](#), [PBS](#), [Le Monde \(FR\)](#), [Die Zeit \(DE\)](#), [Die Spiegel \(DE\)](#), [El Pais \(ES\)](#), [RT](#), [The Hill](#), [Telegraph \(UK\)](#), [Scientific American](#), [New Scientist](#), [Five Thirty Eight](#), [Gizmodo](#), [Fast Company](#), [Computer World](#), [ZDNet](#), [Tom's guide](#), [Popular Mechanics](#), [Motherboard](#), [US News](#), [NBC](#), [CNBC](#), [Huffington Post \(US\)](#), [IEEE Spectrum](#), [Phys.org](#), [Radio Canada \(FR\)](#), [Le Vif \(FR\)](#), [Slate \(FR\)](#), [Trends-Tendance \(FR\)](#), [Science et vie \(FR\)](#).
- Rutgers CommInfo Public Relations, **Appellate Court Cites Vivek Singh's Study in Decision Against the NSA**, <https://comminfo.rutgers.edu/news/appellate-court-cites-vivek-singhs-study-in-decision-against-the-nsa.html>; [Court judgement](#) (page 9)
- ACM Tech News, University Receives Grant to Prevent Cyberbullying, <http://cacm.acm.org/news/185388-university-receives-grant-to-prevent-cyberbullying/fulltext>