

## Munindar P. Singh

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### Professional Preparation

Indian Institute of Technology	New Delhi, India	Computer Science & Engineering	B.Tech.	1986
University of Texas	Austin, Texas	Computer Sciences	M.S.C.S.	1988
University of Texas	Austin, Texas	Computer Sciences	Ph.D.	1993

### Appointments

- Alumni Distinguished Graduate Professor, NCSU, Raleigh, NC: March 2016–present.
- Co-Director, Science of Security Lablet, NCSU, February 2014–present.
- Professor, Computer Science, NCSU, Raleigh, NC: August 2003–present.
- Associate Professor (tenured), Computer Science, NCSU, Raleigh, NC: August 2000–July 2003.
- Assistant Professor, Computer Science, NCSU, Raleigh, NC: August 1995–July 2000.
- Member of the Technical Staff, MCC, Austin, TX: December 1992–July 1995.

### Selected Publications

1. Munindar P. Singh and Michael N. Huhns. *Service-Oriented Computing: Semantics, Processes, Agents*. Chichester, United Kingdom: John Wiley & Sons, 2005. DOI: 10.1002/0470091509.
2. Nirav Ajmeri, Hui Guo, Pradeep K. Murukannaiah, and Munindar P. Singh. “Elessar: Ethics in Norm-Aware Agents.” In: *Proceedings of the 19th International Conference on Autonomous Agents and MultiAgent Systems (AAMAS)*. Auckland: IFAAMAS, May 2020, pages 16–24. DOI: 10.5555/3398761.3398769.
3. Zhen Guo, Zhe Zhang, and Munindar P. Singh. “In Opinion Holders’ Shoes: Modeling Cumulative Influence for View Change in Online Argumentation.” In: *Proceedings of the 29th Web Conference (WWW)*. Taipei: ACM, April 2020, pages 2388–2399. DOI: 10.1145/3366423.3380302.
4. Hui Guo and Munindar P. Singh. “Caspar: Extracting and Synthesizing User Stories of Problems from App Reviews.” In: *Proceedings of the 42nd International Conference on Software Engineering (ICSE)*. Seoul: ACM, May 2020, pages 1–13. DOI: 10.1145/3377811.3380924.
5. Munindar P. Singh and Amit K. Chopra. “Clouseau: Generating Communication Protocols from Commitments.” In: *Proceedings of the 34th Conference on Artificial Intelligence (AAAI)*. New York: AAAI Press, February 2020, pages 7244–7252. DOI: 10.1609/aaai.v34i05.6215.
6. Özgür Kafalı, Nirav Ajmeri, and Munindar P. Singh. “Specification of Sociotechnical Systems via Patterns of Regulation and Control.” In: *ACM Transactions on Software Engineering and Methodology (TOSEM)* 29.1 (December 2019), 7:1–7:50. DOI: 10.1145/3365664.
7. Zhe Zhang and Munindar P. Singh. “Leveraging Structural and Semantic Correspondence for Attribute-Oriented Aspect Sentiment Discovery.” In: *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)*. Hong Kong, November 2019, pages 5531–5541. DOI: 10.18653/v1/D19-1555.
8. Anup K. Kalia, Nirav Ajmeri, Kevin Chan, Jin-Hee Cho, Sibel Adalı, and Munindar P. Singh. “The Interplay of Emotions and Norms in Multiagent Systems.” In: *Proceedings of the 28th International Joint Conference on Artificial Intelligence (IJCAI)*. Macau: IJCAI, August 2019, pages 371–377. DOI: 10.24963/ijcai.2019/53.

9. Nirav Ajmeri, Hui Guo, Pradeep K. Murukannaiah, and Munindar P. Singh. “Robust Norm Emergence by Revealing and Reasoning about Context: Socially Intelligent Agents for Enhancing Privacy.” In: *Proceedings of the 27th International Joint Conference on Artificial Intelligence (IJCAI)*. Stockholm: IJCAI, July 2018, pages 28–34. DOI: 10.24963/ijcai.2018/4.
10. Zhe Zhang and Munindar P. Singh. “Limbic: Author-Based Sentiment Aspect Modeling Regularized with Word Embeddings and Discourse Relations.” In: *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)*. Brussels, November 2018, pages 3412–3422. DOI: 10.18653/v1/D18-1378.
11. Thomas Christopher King, Akın Günay, Amit K. Chopra, and Munindar P. Singh. “Tosca: Operationalizing Commitments over Information Protocols.” In: *Proceedings of the 26th International Joint Conference on Artificial Intelligence (IJCAI)*. Melbourne: IJCAI, August 2017, pages 256–264. DOI: 10.24963/ijcai.2017/37.

### Advisees

Postdoctoral fellows: nine          PhD graduates: twenty-seven          MS graduates: thirty-two

### Awards and Recognition

- ACM/SIGAI Autonomous Agents Research Award. 2020.
- IFAAMAS Influential Paper Award. *International Foundation for Autonomous Agents and MultiAgent Systems*. 2016.
- Fellow. *Association for the Advancement of Artificial Intelligence (AAAI)*. 2017.
- Fellow. *Institute of Electrical and Electronics Engineers (IEEE)*. 2009.
- Member. *NCSU Research Leadership Academy*. 2017.
- NCSU Alumni Association Outstanding Research Award. 2015, 2017.
- NCSU Alumni Association Distinguished Graduate Professorship Award. 2016.
- Shared University Research Award. *IBM*. 2018.
- Faculty Award. *IBM*. 2016, 2007, 2000, 1998, 1997, 1996.
- Open Innovation Project. *Xerox*. 2011, 2012.
- Faculty Award. *Intel Research Council*. 2007.
- University Research Award. *Cisco*. 2000.
- CAREER Award. *National Science Foundation*. 1996.

### Selected Professional Service

- Editor-in-Chief. *ACM Transactions on Internet Technology*. December 2012–November 2018.
- Editor-in-Chief. *IEEE Internet Computing*. 1999–2002. Department Editor, Internet Ethics: Fairness, Accountability, Transparency: 2020–present.
- Member. *Strategy Workshop*. Army Research Office Computing Sciences Division, 2011 and 2017.
- Member. *Expert panel on Ensuring Cross-Enterprise Semantic Interoperability in Synoptic (Templated) Clinical Reporting*. Sponsored by the Office of the Assistant Secretary for Planning & Evaluation (ASPE) (US Department of Health and Human Services) and the Pathology Electronic Reporting Committee of the College of American Pathologists. 2008–2009.
- Charter Member of the Board of Directors. *International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS)*. 2007–2012.
- General Cochair. *4th International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS)*. Utrecht, The Netherlands, July 2005.
- Program Vice Chair for *Internet and Web Computing*. *IEEE International Conference on Distributed Computing Systems (ICDCS)*. Columbus, Ohio, 2005.
- Member, Steering Committee. *IEEE Transactions on Mobile Computing*. 2001–2004.
- Editor-in-Chief. *IEEE Internet Computing*. 1999–2002.