

*Curriculum Vitæ*  
**Kevin Crowston**

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## RESEARCH INTERESTS

**New ways of organizing made possible using information and communications technology.**

I approach this question in several ways: empirical studies of coordination-intensive processes in human organizations; theoretical characterizations of coordination problems and alternative methods for managing them; and design and empirical evaluation of new kinds of computer systems to support people working together. Specific topics of interest are virtual organizations particularly Free/Libre Open Source Software development teams and citizen science projects and the impacts of artificial intelligence on work.

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## EDUCATION

### Harvard University

1980–1984 **A. B.**, *magna cum laude*, June 1984, Applied Mathematics (Computer Science).

### Massachusetts Institute of Technology

1984–1991 **Ph. D.**, February 1991, Information Technologies, Sloan School of Management. Minor in statistics. Additional coursework in organizational studies.

Dissertation: *Towards a coordination cookbook: Recipes for multi-agent action*. Case studies and modelling of the engineering change process in three manufacturing organizations, leading to a typology of coordination problems and mechanisms.

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## APPOINTMENTS

1991 **Lecturer**, Massachusetts Institute of Technology.

1991–1996 **Assistant Professor**, University of Michigan Business School.

1996– **Distinguished Professor**, School of Information Studies, Syracuse University. **Assistant Professor**, 1996–2001; **Associate Professor** with tenure, 2001–2006; **Full Professor**, 2006–2012; **Distinguished Professor**, 2012–.

2016– **Associate Dean for Research**.

### Visiting Positions

**Visiting Researcher**, London Business School, London, United Kingdom, Summer 1995; Erasmus University, Rotterdam, The Netherlands, Summer 1997, 1998; CeTIM, University of the Federal Armed Forces, Munich, Germany, Summer 1999–2011.

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- February- June, 2000 **Visiting Lecturer**, University of Auckland, Department of Management Science and Information Systems.
- January- February 2008 **Shidler Visiting Scholar**, University of Hawai'i, Shidler College of Business, Department of Information Technology Management.
- March-May 2008 **Visiting Scholar**, Centre for Work, Technology and Organizations, Department of Management Science and Industrial Engineering, Stanford University.
- September 2012– December 2014 **Program Director**, Cyber-Human Systems & Human-Centered Computing Program, Information and Intelligent Systems Division, Computer and Information Science and Engineering Directorate, United States National Science Foundation.

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## RESEARCH GRANTS (16 grants totalling \$5.9M; \$3.2M weighted by contribution).

- Continuously funded by NSF since 2003.
- 1993–1997 **Co-principal investigator** on NSF IRI Grant 92–24093, \$969,993, for “Tools for inventing organizations: toward a handbook of organizational processes” (with Thomas W. Malone, Brian Pentland and Jin-tae Lee).
- 1998–1999 **Co-principal investigator** on NSF IIS Grant 97–32799, \$70,000, for “A multi-method multi-level pilot study of the use of information technology in real estate” (with Rolf Wigand and Steven Sawyer).
- 1998–1999 **Principal investigator** on Grant from iLab, London Business School, £5000 (\$8,367) for “Study of Web buyer’s agents”.
- 2000–2002 **Co-principal investigator** on NSF IIS Grant 00–00178, \$269,969, for “Towards friction-free work: a multi-method study of the use of information technology in the real estate industry” (with Rolf Wigand and Steven Sawyer).
- 2003–2004 **Principal investigator** on NSF IIS SGER Grant 03–41475, \$12,052, for “Effective work practices for Open Source software development”.
- 2004–2006 **Principal investigator** on NSF IIS Grant 04–14468, \$327,026 for 24 months, for “Effective work practices for Open Source Software development”.
- 2004–2006 **Principal investigator** on NSF IIS Grant 04–14482, \$302,685 for 24 months, for “How can document-genre metadata improve information-access for large digital collections?” (with Barbara Kwaśnik).
- 2005–2008 **Co-principal investigator** on NSF HSD Grant 05–27457, \$684,882 for 36 months, for “Investigating the dynamics of Free/Libre Open Source Software development teams” (with Robert Heckman and Elizabeth Liddy). Additional \$29,488 to support international travel for students.
- 2007–2010 **Co-principal investigator** on NSF CRI Grant 07–08437, \$100,000 for 36 months, for “Data and analysis archive for research on Free and Open Source Software and its development” (with

Megan Conklin, Elon University).

2008–2011 **International professor** on Regione Puglia Grant PS025 €1,032,000 for 36 months, for “ICT supporting logistic services: a model of organized market (L’OrMaICT)”.

2009–2011 **Principal investigator** on NSF OCI Grant 09–43049, \$150,000 for 24 months, for “Theory and design of virtual organizations for citizen science”.

2010–2013 **Principal investigator** on NSF SOCS Grant 09–68470, \$478,858 for 36 months, for “SOCS: Socially intelligent computing to support citizen science”. Additional \$15,969 for 2 REU supplements. Replacement PI (2012–2013): June Wang.

2011–2014 **Principal investigator** on NSF SOCS Grant 11–11107, \$747,831 for 36 months for “SOCS: Socially intelligent computing for coding of qualitative data” (with Nancy McCracken).

2012–2015 **Principal investigator** on NSF SOCS Grant 12–11071, \$305,099 for 36 months for “Collaborative Research: Focusing Attention to Improve the Performance of Citizen Science Systems: Beautiful Images and Perceptive Observers” (with Arfon Smith, Adler Planetarium). Replacement PI (2012–2015): Carsten Østerlund.

2015–2018 **Co-Principal investigator** on NSF INSPIRE Grant 15–47880, \$999,663 for 36 months for “Teaming Citizen Science with Machine Learning to Deepen LIGO's View of the Cosmos” (with Vassiliki Kalogera, Northwestern; Joshua Smith, Cal State Fullerton; Shane Larson, Northwestern & Laura Trouille, Adler Planetarium). Syracuse subcontract \$294,818.

2016–2019 **Principal investigator** on NSF CHS Grant 16–18444, \$499,931 for 36 months for “CHS: Small: Supporting Stigmergic Coordination”.

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## EDUCATIONAL, TRAVEL AND ORGANIZATIONAL GRANTS

1998–1999 **Co-principal investigator** on Grant 99VF36L from the Vision Fund, Syracuse University, \$25,000 (plus \$14,925 in matching funds from the School of Information Studies) for “Development of an innovative interdisciplinary web-based course for all master's-level students in the School of Information Studies”.

2004–2007 **Project director** on IMLS Grant, \$499,727 (plus \$119,488 in matching funds) for 36 months, for “Educating library faculty for the 21st century: The Future Professoriate for Librarianship project”.

2009 **Principal investigator** on NSF HCC Grant 09–29125, \$19,994 for 12 months, for “Travel support for the OSS 2009 Doctoral Consortium”.

2010 **Principal investigator** on NSF HCC Grant 10–05183, \$17,720 for 6 months, for “Travel support for the OSS 2010 Doctoral Consortium”.

2010–2011 **Principal investigator** on NSF IIS Grant 11–02558, \$24,995 for 12 months for “Workshop: Organizational Communications and Information Systems Doctoral Consortium”.

2016 **Principal investigator** on NSF IIS Grant 16–39136, \$13,272 for 12 months for “Travel Support for the Open Source Systems 2016 Doctoral Consortium”.

- 2017 **Principal investigator** on NSF IIS Grant 17-13738, \$27,840 for 12 months for “WORKSHOP: The iConference 2017 Doctoral Colloquium”.
- 2018 **Principal investigator** on NSF IIS Grant 17-45463, \$499,796 for 60 months for “Convergence HTF: A Research Coordination Network to Converge Research on the Socio-Technological Landscape of Work in the Age of Increased Automation” (with Jeffrey Nickerson and Ingrid Erickson).

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## PUBLICATIONS

### Evidence of Scholarly Impact

Citations and h-index: 18,776 / 57 (Google Scholar); 5,732 / 33 (Scopus)

21 publications with more than 200 citations according to Google Scholar (starred below)

### Best Publication Awards

- 1991 **Thesis Prize** for best dissertation in Information Systems, 1990–1991, International Centre for Information Technology (ICIT).
- 1992 Runner-up, **Best Thesis Prize**, International Conference on Information Systems (ICIS).
- 2005 **Best Visual Presentation Award**, OCIS Division, Academy of Management
- 2012 **Best Published Paper** in Information Systems, Association for Information Systems
- 2015 **Paul Gray Award for the Most Thought Provoking Paper** in Information Systems, Association for Information Systems
- 2016 **Best Published Social Informatics Paper Award**, Association for Information Science & Technology

### Refereed Journal Publications (total: 57)

- 1987 Crowston, K., Malone, T. W., and Lin, F. Cognitive science and organizational design: A case study of computer conferencing. *Human Computer Interaction*, 3(1), 59–85, doi: 10.1207/s15327051hci0301\_4.
- Originally appeared in *Proceedings of the Conference on Computer Supported Cooperative Work (CSCW '86)* (pp. 43–61). Austin, TX: ACM, 1986.
- Reprinted in I. Grief (Ed.) *Computer-supported cooperative work: A book of readings* (pp. 713–740). San Mateo, CA: **Morgan Kaufmann**, 1988.
- \*1994 Malone, T. W. & Crowston, K. The interdisciplinary study of coordination. *ACM Computing Surveys*, 26(1), 87–119, doi: 10.1145/174666.174668.
- Reprinted in Olson, G. M, Malone, T. W., and Smith, J. B. (Eds.) *Coordination Theory and Collaboration Technology* (pp. 7–50). Mahwah, NJ: **Lawrence Erlbaum Associates**, 2001.
- Reprinted in Malone, T. W., Crowston, K. & Herman, G. (Eds.) *Organizing Business Knowledge: The MIT Process Handbook*. Cambridge, MA: **MIT Press**, 2002.

- 1996 Crowston, K. An approach to evolving novel organizational forms. *Computational and Mathematical Organization Theory*, 2(1), 29–47, doi: 10.1007/BF00125762.
- \*1997 Crowston, K. A coordination theory approach to organizational process design. *Organization Science*, 8(2), 157–175, doi: 10.1287/orsc.8.2.157.
- \*1998 Crowston, K. & Kammerer, E. E. Coordination and collective mind in software requirements analysis. *IBM Systems Journal*, 37(2), 227–245, doi: 10.1147/sj.372.0227.
- \*1999 Malone, T. W., Crowston, K., Lee, J., Pentland, B., Dellarocas, C., Wyner, G., Quimby, J., Osborne, C., Bernstein, A., Herman, G., Klein, M. & O'Donnell, E. Tools for inventing organizations: Toward a handbook of organizational processes. *Management Science*, 45(3), 425–443. doi: 10.1287/mnsc.45.3.425.
- Reprinted in Malone, T. W., Crowston, K. & Herman, G. (Eds.) *Organizing Business Knowledge: The MIT Process Handbook*. Cambridge, MA: MIT Press, 2003.
- Reprinted in Malone, T. W., Laubacher, R. & Scott Morton, M. S. (Eds.) *Inventing the Organizations of the 21st Century*. Cambridge, MA: MIT Press, 2003.
- 1999 Crowston, K. & Wigand, R. Real estate war in cyberspace: An emerging electronic market? *International Journal of Electronic Markets*, 9(1–2), 1–8. Available from [http://surface.syr.edu/ischool\\_other/6/](http://surface.syr.edu/ischool_other/6/).
- \*2000 Crowston, K. & Williams, M. Reproduced and emergent genres of communication on the World-Wide Web. *The Information Society*, 16(3), 201–215, doi: 10.1080/01972240050133652.
- 2001 Crowston, K., Sawyer, S. & Wigand, R. Investigating the interplay between structure and information and communications technology in the real estate industry. *Information, Technology and People*, 14(2), 163–183. (This paper received a “Highly commended award”.) doi: 10.1108/09593840110695749.
- 2001 Crowston, K. & MacInnes, I. The effects of market-enabling Internet agents on competition and prices. *Journal of Electronic Commerce Research*, 2(1). Available from: <http://surface.syr.edu/istpub/81/>.
- \*2002 Crowston, K. & Scozzi, B. Open source software projects as virtual organizations: Competency rallying for software development. *IEE Proceedings Software*, 149(1), 3–17, doi: 10.1049/ip-sen:20020197.
- 2002 Watson-Manheim, M.-B., Chudoba, K. M. & Crowston, K. Discontinuities and continuities: A new way to understand virtual work. *Information, Technology and People*, 15(3), 191–209, doi: 10.1108/09593840210444746.
- 2003 Sawyer, S., Crowston, K., Wigand, R., and Allbritton, M. The social embeddedness of transactions: Evidence from the residential real estate industry. *The Information Society*, 19(2), 135–154, doi: 10.1080/01972240309460.
- 2003 Crowston, K. The evolution of high-reliability coordination mechanisms for collision avoidance. *The Journal of Information Technology Theory and Application (JITTA)*, 5(3), 1–29. Available from: <http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1145&context=jitta>.

- 2004 Myers, M. D. and Crowston, K. Will real estate agents survive? The transformation of the real estate industry by information technology, *University of Auckland Business Review*, 6(1), 1–13. Available from: <http://www.uabr.auckland.ac.nz/files/articles/Volume6/v6i1-myers-crowston.pdf>.
- 2004 Crowston, K. & Myers, M. D. Information technology and the transformation of industries: Three research perspectives. *Journal of Strategic Information Systems*, 13(1), 5–28, doi: 10.1016/j.jsis.2004.02.001.
- \*2005 Crowston, K. & Howison, J. The social structure of Free and Open Source software development. *First Monday* 10(2), February. doi: 10.5210/fm.v10i2.1207  
Reprinted in *First Monday*, Special issue #2: Open Source.
- \*2005 Scozzi, B., Garavelli, C. & Crowston, K. Methods for modeling and supporting innovation processes in SMEs. *European Journal of Innovation Management*, 8(1), 120–137, doi: 10.1108/14601060510578619.
- 2005 Sawyer, S., Wigand, R. & Crowston, K. Redefining access: Uses and roles of information and communication technologies in the US residential real estate industry from 1995 to 2005. *Journal of Information Technology*, 20(4), 213–223, doi: 10.1057/palgrave.jit.2000049.
- \*2006 Crowston, K., Howison, J. & Annabi, H. Information systems success in free and open source software development: Theory and measures. *Software Process—Improvement and Practice (SPIP)*, 11(2), 123–148, doi: 10.1002/spip.259.
- \*2006 Howison, J., Conklin, M. & Crowston, K. FLOSSmole: A collaborative repository for FLOSS research data and analyses. *International Journal of Information Technology and Web Engineering (IJITWE)*, 1(3), 17–26, doi: 10.4018/jitwe.2006070102.  
Reprinted in Tiako, P. F. (Ed.) *Software Applications: Concepts, Methodologies, Tools, and Applications* (pp. 85–94). Hershey, PA: IGI Global, 2009.  
Reprinted in Alkhatib, G. I. & Rine, D. C. (Eds.) *Integrated Approaches in Information Technology and Web Engineering: Advancing Organizational Knowledge Sharing* (pp. 18–27). Hershey, PA: IGI Global, 2010, doi: 10.4018/978-1-60566-418-7.ch002.
- 2006 Crowston, K. & Howison, J. Hierarchy and centralization in Free and Open Source Software team communications. *Knowledge, Technology & Policy*. 18(4), 65–85, doi: 10.1007/s12130-006-1004-8.
- 2006 Massad, N., Heckman, R. & Crowston, K. Customer satisfaction with electronic service encounters. *International Journal of Electronic Commerce*, 10(4), 73–104, doi: 10.2753/JEC1086-4415100403.
- \*2007 Crowston, K., Li, Q., Wei, K., Eseryel, U. Y., & Howison, J. Self-organization of teams for free/libre open source software development. *Information and Software Technology*, 49(6), 564–575, doi: 10.1016/j.infsof.2007.02.004.
- 2007 Crowston, K., Howison, J., Masango, C., & Eseryel, U. Y. The role of face-to-face meetings in technology-supported self-organizing distributed teams. *IEEE Transactions on Professional Communications*, 50(3), 185–203, doi: 10.1109/TPC.2007.902654.

- 2008 Crowston, K. & Scozzi, B. Bug fixing practices within Free/Libre Open Source software development teams. *Journal of Database Management*, Special Issue on Open Source Software, 19(2), 1–30. doi: 10.4018/jdm.2008040101
- Reprinted in Erickson, J. (Ed.) *Database Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 797–828). Hershey, PA: **IGI Global**, 2009.
- Reprinted in Tiako, P. F. (Ed.) *Software Applications: Concepts, Methodologies, Tools, and Applications* (pp. 1079–1110). Hershey, PA: **IGI Global**, 2009.
- Reprinted in Siau, K. & Erickson, J. (Eds.) *Principle Advancements in Database Management Technologies: New Applications and Frameworks* (pp. 51–81). Hershey, PA: **IGI Global**, 2010.
- 2008 Katzy, B. & Crowston, K. Competency rallying for technical innovation: The case of the Virtuelle Fabrik. *Technovation*, 28(10), 679–692, doi: 10.1016/j.technovation.2007.11.003.
- 2010 Wiggins, A. & Crowston, K. Developing a conceptual model of virtual organizations for citizen science (Research note). *International Journal of Organizational Design and Engineering*, 1(1/2), 148–162, doi: 10.1504/IJODE.2010.035191.
- 2011 Chudoba, K. M. Watson-Manheim, M. B., Crowston, K., & Lee, C. S. ICT-supported meetings in practice. *Journal of Organizational and End User Computing*, 23(2), doi: 10.4018/joeuc.2011040102.
- Reprinted in Dwivedi, A. & Clarke, S. (Eds.) *Innovative Strategies and Approaches for End-User Computing Advancements* (pp. 192–214), Hershey, PA: **IGI Global**, 2013.
- \*2011 Howison, J., Wiggins, A. & Crowston, K. Validity issues in the use of social network analysis for the study of online communities. *Journal of the Association for Information Systems* 12(12), 323–346. Available from: <http://aisel.aisnet.org/jais/vol12/iss12/2/>
- \*2012 Watson-Manheim, M. B., Chudoba, K. & Crowston, K. Perceived discontinuities and constructed continuities in virtual work, *Information Systems Journal*, 22(1), 29–52, doi: 10.1111/j.1365–2575.2011.00371.x. (This paper was one of five named as **Best Published Paper in Information Systems** for 2012.)
- \*2012 Crowston, K., Wei, K., Howison, J. and Wiggins, A. Free/Libre Open Source Software: What we know and what we do not know. *ACM Computing Surveys*, 44(2). article 7, doi: 10.1145/2089125.2089127
- \*2012 Newman, G., Wiggins, A., Crall, A., Graham, E., Newman, S., and Crowston, K. Citizen science futures: Emerging technologies and shifting paradigms. *Frontiers in Ecology and the Environment*, 10(6), 298–304. doi: 10.1890/110294
- 2012 Crowston, K., Allen, E. E. & Heckman, R. Using natural language processing for qualitative data analysis. *International Journal of Social Research Methodology*, 15(6), 523–543. doi: 10.1080/13645579.2011.625764
- 2013 Crowston, K., Jullien N., & Ortega F. Sustainability of open collaborative communities: Analyzing recruitment efficiency. *Technology Innovation Management Review*. January, 20–26. Available from: <http://timreview.ca/article/646>

- 2014 Howison, J., & Crowston K. Collaboration through superposition: How the IT artifact as an object of collaboration affords technical interdependence without organizational interdependence. *MIS Quarterly*, 38(1), 29–50. doi: 10.25300/misq/2014/38.1.02
- 2014 Sawyer, S., Crowston, K. and Wigand R. Digital assemblages: Evidence and theorizing from the computerization of the U.S. residential real estate industry. *New Technology, Work and Employment*, 29(1), 40–56. doi: 10.1111/ntwe.12020
- 2014 Wei, K., Crowston, K. & Li, N. Group maintenance in technology-supported distributed teams. *Information & Management*, 51(3), 297–309. doi: 10.1016/j.im.2014.02.001
- 2015 Wiggins, A. & Crowston, K. Surveying the citizen science landscape. *First Monday*, 26(1). doi: 10.5210/fm.v20i1.5520
- 2015 Crowston, K., Specht A., Hoover C., Chudoba K. M., & Watson-Manheim M. B. Perceived discontinuities and continuities in transdisciplinary scientific working groups. *Science of the Total Environment*, 534, 159–172. doi: 10.1016/j.scitotenv.2015.04.121
- 2015 Crowston, K., Sawyer, S. & Wigand, R. Social networks and the success of market intermediaries: Evidence from the US residential real estate industry. *The Information Society*, 31(5), 361–378. doi: 10.1080/01972243.2015.1041665. (This paper won the award for **Best Published Social Informatics Paper** of 2015.)
- 2015 Crowston, K. “Personas” to support development of cyberinfrastructure for scientific data sharing. *Journal of eScience Librarianship*, 4(2), e1082. doi: 10.7191/jeslib.2015.1082.
- 2016 Bolici, F., Howison, J. & Crowston, K. Stigmergic coordination in FLOSS development teams: Integrating explicit and implicit mechanisms. *Cognitive Systems Research*, 38, 14–22. doi: 10.1016/j.cogsys.2015.12.003. (This paper was one of the most downloaded articles from the journal in 2016.)
- 2016 Katzy, B., Crowston, K. & Sung, G. Alignment of IS and business strategies for inter-organisational networks: The case of ARC Transistance. *European Journal of Information Systems*, 25(6), 553–568. doi: 10.1057/ejis.2016.9
- 2017 Prestopnik, N. R., Crowston, K. & Wang, J. Gamers, citizen scientists, and data: Exploring participant contributions in two games with a purpose. *Computers in Human Behaviour*, 68, 254–268. doi: 10.1016/j.chb.2016.11.035
- 2017 Zevin, M., Coughlin, S., Bahaadini, S., Besler, E., Rohani, N., Allen, S., Cabero, M., Crowston, K., Katsaggelos, A., Larson, S., Lee, T., Lintott, C., Littenberg, T., Lundgren, A., Østerlund, C., Smith, J., Trouille, L. and Kalogera, V. Gravity Spy: Integrating Advanced LIGO detector characterization, machine learning and citizen science. *Classical and Quantum Gravity*. 34(6), 1–22. doi: 10.1088/1361-6382/aa5cea
- 2017 Wei, K., Crowston, K., Eseryel, U. Y. & Heckman, R. Roles and politeness behavior in community-based Free/Libre Open Source Software development. *Information & Management*. 54(5), 573–582, doi: 10.1016/j.im.2016.11.006
- 2017 Jarrahi, M. H., Crowston, K., Bondar, K. & Katzy, B. A pragmatic approach to managing enterprise IT infrastructures in the era of consumerization and individualization of IT.



- International Journal of Information Management*. 37(6), 566–575. doi: 10.1016/j.ijinfomgt.2017.05.016
- 2017 Crowston, K. and Shamshurin, I. Core-periphery communication and the success of Free/Libre Open Source Software projects. *Journal of Internet Services and Applications (JISA)*, Thematic Series on FOSS Development, 8(10). doi: 10.1186/s13174-017-0061-4
- 2017 Qin, J., Crowston, K. & Kirkland, A. Pursuing best performance in research data management by using the capability maturity model and rubrics. *Journal of eScience Librarianship*, 6(2), e1113. doi: 10.7191/jeslib.2017.1113
- 2017 Curty, R. G., Crowston, K., Specht, A., Grant, B., & Walton, E. D. Attitudes and norms affecting scientists' data reuse. *PLoS ONE*, 12(12): e0189288 doi: 10.1371/journal.pone.0189288.
- 2018 Crowston, K. & Fagnot, I. Stages of motivation for contributing user-generated content: A theory and empirical test. *International Journal of Human-Computer Studies*, 109, 89–101. doi: 10.1016/j.ijhcs.2017.08.005
- 2018 Lee, T. K., Crowston, K., Harandi, M., Østerlund, C. & Miller, G. Appealing to different motivations in a message to recruit citizen scientists: Results of a field experiment. *Journal of Science Communication*, 17(1), A02. doi: 10.22323/2.17010202
- 2018 Jackson, C. B., Crowston, K., Østerlund, C., & Harandi, M. Folksonomies to support coordination and coordination of folksonomies. *Computer Supported Cooperative Work*, 27(3–6), 647–678. doi: 10.1007/s10606-018-9327-z
- In press Østerlund, C. & Crowston, K. Documentation and access to knowledge in online communities: Know your audience and write appropriately? *Journal of the Association for Information Science and Technology (JASIST)*. doi: 10.1002/asi.24152
- In press Crowston, K., Mitchell, E. Michelle, & Østerlund, C. Coordinating advanced crowd work: Extending citizen science. *Citizen Science: Theory and Practice*.

### Highly-Selective Conference Proceedings (total: 19)

- 1986 Crowston, K. & Treacy, M. E. Assessing the impact of information technology on enterprise level performance. In *Proceedings of the Sixth International Conference on Information Systems (ICIS 1986)* (pp. 299–310). Indianapolis, IN, USA. Available from: <http://openlibrary.org/books/OL17942878M>.
- 1989 Mackay, W. E., Malone, T. W., Crowston, K., Rao, R., Rosenblitt, D. & Card, S. K. How do experienced Information Lens users use rules? In K. Bice and C. Lewis. (Eds.), *Proceedings of the Conference on Human Factors in Computing Systems (SIGCHI 1989)* (pp. 211–216). Austin, TX, USA. (Proceedings reprinted as *ACM SIGCHI Bulletin*, Volume 20, Issue SI.) doi: 10.1145/67449.67491.
- \*1990 Malone, T. W. & Crowston K. What is coordination theory and how can it help design cooperative work systems? In *Proceedings of the Conference on Computer Supported Cooperative Work (CSCW 1990)* (pp. 357–370). Los Angeles, CA, USA: ACM. doi: 10.1145/99332.99367.

- Reprinted in D. Marca and G. Bock. (Eds.) *Groupware: Software for Computer-Supported Cooperative Work* (pp. 100–115). Washington: IEEE Press, 1992.
- 1996 Crowston, K. Market-enabling Internet agents. In J. DeGross, S. Jarvenpaa and A. Srinivasan. (Eds.) *Proceedings of the International Conference on Information Systems (ICIS 1996)*, Columbus, OH, USA, December. Available from: <http://aisel.aisnet.org/icis1996/27/>
- 1998 Crowston, K. Price behaviour in a market with Internet buyer's agents (Research in progress paper). In *Proceedings of the International Conference on Information Systems (ICIS 1998)*, Atlanta, GA, USA, December 14–17. Available from: <http://portal.acm.org/citation.cfm?id=353071.353221>.
- 2000 Sawyer, S., Crowston, K., Allbritton, M. & Wigand, R. How do information and communication technologies reshape work? Evidence from the residential real estate industry (Research-in-progress paper). In *Proceedings of the International Conference on Information Systems (ICIS 2000)*, Brisbane, Australia, December 10–13. (Nominated for best paper in *Advances in Organizational and Social Informatics* track.) Available from: <http://dl.acm.org/citation.cfm?id=359640.359914>.
- \*2003 Crowston, K., Annabi, H., & Howison, J. Defining Open Source Software project success. In *Proceedings of the International Conference on Information Systems (ICIS 2003)*, Seattle, WA, USA, December. doi: 10.1287/mnsc.1060.0550
- 2005 Crowston, K., Wei, K., Li, Q., Eseryel, U. Y. & Howison, J. Coordination of Free/Libre Open Source Software development. In *Proceedings of the International Conference on Information Systems (ICIS 2005)*, Las Vegas, NV, USA, December. doi: 10.1145/1029997.1030003
- 2006 Heckman, R., Crowston, K., Li, Q., Allen, E., Eseryel, Y., Howison, J. & Wei, K. Emergent decision-making practices in technology-supported self-organizing distributed teams. In *Proceedings of the International Conference on Information Systems (ICIS 2006)*, Milwaukee, WI, 10–13 December. Available from: <http://aisel.aisnet.org/icis2006/43/>
- 2008 Annabi, H., Crowston, K. & Heckman, R. Depicting what really matters: Using episodes to study latent phenomenon. In *Proceedings of the International Conference on Information Systems (ICIS 2008)*, Paris, France, 14–17 December. Available from <http://aisel.aisnet.org/icis2008/183/>.
- 2008 Li, Q., Heckman, R., Allen, E., Crowston, K., Eseryel, U. Y. & Howison, J. Decision-making paths in self-organizing distributed teams. In *Proceedings of International Conference on Information Systems (ICIS 2008)*, Paris, France, 14–17 December. Available from <http://aisel.aisnet.org/icis2008/99/>
- 2010 Wei, K. & Crowston, K. The impact of national culture on knowledge sharing in global virtual collaboration. In *Proceedings of International Conference on Information Systems (ICIS 2010)*, St. Louis, MO, USA, 12–15 December. Available from [http://aisel.aisnet.org/icis2010\\_submissions/137](http://aisel.aisnet.org/icis2010_submissions/137)
- 2011 Østerlund, C. & Crowston, K. Boundary-spanning documents in online communities (Research in progress). In *Proceedings of the International Conference on Information Systems (ICIS 2011)*, Shanghai, China, 4–7 December. Available from: <http://aisel.aisnet.org/icis2011/proceedings/onlinecommunity/6/>

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- 2014 Whelan, E., Conboy, K., Crowston, K., Morgan, L. and Rossi, M. Editorial: The role of information systems in enabling open innovation. *Journal of the Association for Information Systems (JAIS)*, 15(11), i–x. Available from: <http://aisel.aisnet.org/jais/vol15/iss11/4/>

- 2015 Niederman, F., Crowston, K., Koch, H., Krcmar, H., Powell, P. and Swanson, E. B. Assessing IS research impact. *Communications of the Association for Information Systems (CAIS)*, 36(1), 7. Available from: <http://aisel.aisnet.org/cais/vol36/iss1/7>. (Winner of the **Paul Gray Award for the Most Thought Provoking Paper** in 2015.)
- 2015 *DataONE Personas*. Available from: <https://www.dataone.org/user-personas>
- 2016 Crowston, K. Response to “Ideational influence, connectedness, and venue representation: Making an assessment of scholarly capital”. *Journal of Association for Information Systems (JAIS)*.
- 2016 *Manifesto on Engineering Academic Software (Dagstuhl Perspectives Workshop 16252)*. A. Allen, C. Aragon, C. Becker, J. Carver, A. Chiş, B. Combemale, M. Croucher, K. Crowston, D. Garijo, A. Gehani, C. Goble, R. Haines, R. Hirschfeld, J. Howison, K. Huff, C. Jay, D. S. Katz, C. Kirchner, K. Kuksenok, R. Lämmel, O. Nierstrasz, M. Turk, R. van Nieuwpoort, M. Vaughn and J. Vinju (Eds.), **Dagstuhl Manifestos**, 6(1). Wadern, Germany: Schloss Dagstuhl – Leibniz Center for Informatics. doi: 10.4230/DagMan.6.1.1

### *Internet columns for Information, Technology and People*

- 1998 Crowston, K. Software development links. *Information, Technology and People*, 11(2), 161–162.
- 1998 Crowston, K. I/S in Latin America. *Information, Technology and People*, 11(3), 266–267.
- 1998 Crowston, K. Martin Heidegger. *Information, Technology and People*, 12(4), 376.
- 1999 Crowston, K. Making sense of information systems down under. *Information, Technology and People*, 13(1), 116–117.
- 1999 Crowston, K. Websites about phenomenology and action research. *Information, Technology and People*, 13(4), 408–410.
- 2000 Crowston, K. Internet column. *Information, Technology and People*, 14(4), 420–421.
- 2002 Crowston, K. Internet column. *Information, Technology and People*, 15(1), 87.
- 2002 Crowston, K. Websites related to gender and information technology. *Information, Technology and People*, 15(2).
- 2002 Crowston, K. Internet review. *Information, Technology and People*, 15(3), 276–278.
- 2003 Crowston, K. Information technology in the Middle East. *Information, Technology and People*, 16(1), 122.
- 2003 Crowston, K. Internet review. *Information, Technology and People*, 16(2). Omitted from paper publication; appears on-line.
- 2003 Crowston, K. Knowledge management. *Information, Technology and People*, 16(3).
- 2003 Crowston, K. Internet review. *Information, Technology and People*, 16(4).

### **Data Curation**

Organizer (with Megan Squire and James Howison), **FLOSSmole** (<http://flossmole.org/>), a repository of data sets on Free/Libre Open Source Software development projects.

### **Keynote Presentations (total: 6)**

- 2004 Coordination theory: A ten-year retrospective. Keynote address at *1st International Workshop on Computer Supported Activity Coordination*, 6th International Conference on Enterprise Information Systems, Porto, Portugal, 14 April.

- 2005 SE, IS & (FL)OSS @ EASE. Keynote address at the **Empirical Assessment of Software Engineering (EASE) Conference**, Keele, UK, 11–13 April.
- 2015 New modes of coordination for the collaborative economy. Keynote address at the **11th Brazilian Symposium of Information Systems**, Goiânia, Brazil, 26–29 May.
- 2015 New modes of coordination for the collaborative economy. Closing address at the **Journée d'échanges dans le cadre du programme OLASI**, Nantes, France, 17 June.
- 2016 Citizen Science: Learning to effectively contribute in virtual organizations. Keynote lecture at the **11th Chais Conference for the Study of Innovation and Learning Technologies**, Ra'anana, Israel, 16 February.
- 2018 Challenges and opportunities for open collaboration. Keynote speech at the **14th International Symposium on Open Collaboration (OpenSym 2018)**, Paris, France, 22–24 August.

### Presentations at Scientific Meetings

- 1994 Techniques for business process redesign. Panel presentation, **TIMS International Conference**, Anchorage, AK, 12–15 June.
- 1994 Using distributed artificial intelligence models for business process redesign. Paper presentation, **TIMS International Conference**, Anchorage, AK, 12–15 June.
- 1994 Coordination and collective mind in requirements analysis. Panel presentation, **IFIP 8.2 Working Group Meeting**, Ann Arbor, MI, 10–13 August.
- 1994 Organizational processes for coordination. Symposium presentation, **Academy of Management Conference**, Dallas, TX, 14–17 August.
- 1996 Information systems and organizational research. Panel presentation, **INFORMS Conference on Information Systems and Technology**, Washington, DC, 5–6 May.
- 1996 Communicative style and gender differences in computer-mediated communications (with E. Kammerer). Presentation at the OCIS Division, **Academy of Management Conference**, Cincinnati, OH, 13 August.
- 1997 Resource allocation mechanisms in air traffic control. Presentation at the Information Systems Track of the **Administrative Sciences Association of Canada Conference**, St. John's NF, 31 May–2 June.
- 1998 Use of the web for electronic commerce in real estate (with R. Wigand). Presentation, **Association for Information Systems Americas Conference**, Baltimore, MD, 14–16 August.
- 1999 Investigating the interplay between structure and technology in the real estate industry (with S. Sawyer and R. Wigand). Presentation at the OCIS Division, **Academy of Management Conference**, Chicago, IL, 7–11 August.
- 1999 ICT in the real estate industry: Agents and social capital (with S. Sawyer and R. Wigand). Presentation at the **Association for Information Systems Americas Conference**, Milwaukee, WI, 13–15 August). This paper was selected as "Best in mini-track" for the Advances in Organizational and Social Informatics mini-track.

- 2000 The Virtual Factory: Discontinuous work in a virtual organization. Presentation as part of the symposium "Discontinuities: The Key to Understanding Virtual Work", OCIS Division, **Academy of Management Conference**, Toronto, Ontario, 6–9 August.
- 2000 Identifying document genre to improve web search effectiveness. Presentation, **American Society for Information Science and Technology Conference**, Chicago, IL, 13–16 November.
- 2002 Discontinuities and post-bureaucratic organizing: A framework and research propositions (with K. M. Chudoba and M. B. Watson-Manheim). Presentation at the OCIS Division, **Academy of Management Conference**, Denver, CO, 11–14 August.
- 2002 Evolving document genres on the World-Wide Web. Presentation as part of the symposium "Conceptualizing Change in Communicative Genres: Exploring Levels of Analysis and Drivers", OCIS Division, **Academy of Management Conference**, Denver, CO, 11–14 August.
- 2003 Collective mind to support coordination in software engineering. Presentation as part of the symposium "Revisioning Organization Design Theory: Alternative Perspectives", OCIS Division, **Academy of Management Conference**, Seattle, WA, 2–6 August.
- 2003 Coordination and collaboration in Open Source development teams. Presentation as part of the symposium "Coordination and Control In Distributed Teams", OCIS Division, **Academy of Management Conference**, Seattle, WA, 2–6 August.
- 2004 Customer satisfaction with electronic service encounters (with N. Massad and R. Heckman). Presentation at **Association for Information Systems Americas Conference**, New York, NY, 6–8 August).
- 2004 The paradox of discontinuities and continuities: Toward a more comprehensive view of virtuality (with M. B. Watson-Manheim and K. M. Chudoba). Presentation at the *OCIS Division*, **Academy of Management Conference**, New Orleans, LA, 8–11 August).
- 2004 Effective work practices for Software Engineering: Free/Libre Open Source Software Development (with H. Annabi, J. Howison and C. Masango). Presentation at the **WISER Workshop on Interdisciplinary Software Engineering Research**, SIGSOFT 2004/FSE-12 Conference, Newport Beach, CA, 5 November).
- 2005 OSSmole: A collaborative repository for FLOSS research data and analyses (with J. Howison & M. Conklin). Presentation at the **First International Conference on Open Source Systems**, Genova, Italy, 11–15 July).
- 2005 A structural perspective on leadership in Free/Libre Open Source Software teams (with R. Heckman, H. Annabi & C. Masango). Presentation at the **First International Conference on Open Source Systems**, Genova, Italy, 11–15 July.
- 2005 Face-to-face interactions in self-organizing distributed teams (with J. Howison, C. Masango & U. Y. Eseryel). Presentation at the *OCIS Division*, **Academy of Management Conference**, Honolulu, HI, 7–10 August.
- 2006 Challenges in creating a taxonomy for genres of digital documents (with B. Kwaśnik, Y.-L. Chun, J. D'Ignazio & J. Rubleske). Presentation at *International Society for Knowledge Organization* **ISKO2006**, Vienna, Austria, 5–7 July.

- 2006 A practice view on meetings: The impact of ICTs on organization form and function (with K. M. Chudoba, M. B. Watson-Manheim & C. S. Lee). Presentation at the **Academy of Management Conference**, Atlanta, GA, 11–16 August.
- 2006 Language and power in self-organizing distributed teams (with L. Qin K. & R. Heckman). Presentation at the **Academy of Management Conference**, Atlanta, GA, 11–16 August.
- 2007 Data and analyses sharing to support FLOSS research: A debate (with B. Fitzgerald, E. Berdou, M. Conklin, S. Koch, G. Madey and W. Scacchi). Panel session at the **IFIP 3rd International Conference on Open Source Software**, Limerick, Ireland, 10–14 June.
- 2007 Coordinating across boundaries and discontinuities. Presentation as part of the symposium “Coordination Complexity in Geographically Distributed Collaboration”, *OCIS Division, Academy of Management Conference*, Philadelphia, PA, 4–8 August.
- 2007 Distance matters, except when it doesn’t: discontinuities in virtual work (with M. B. Watson-Manheim & K. M. Chudoba). Paper presented at the *OCIS Division, Academy of Management Conference*, Philadelphia, PA, 4–8 August.
- 2008 The motivational arc of massive virtual collaboration (with I. Fagnot). Presentation at the **IFIP WG 9.5 Working Conference on Virtuality and Society: Massive Virtual Communities**, Lüneberg, Germany, 1–2 July.
- 2009 Little eScience, big eScience (with D. Ribes, S. Sawyer & A. Wiggins). Panel at the **iConference**, Chapel Hill, NC, 8–11 February.
- 2010 Crowston, K. Designing scholarly communications. Discussion paper, **IFIP Working Group 8.2/8.6 Joint Working Conference**, Perth, Australia, 30 March–2 April.
- 2010 Using natural language processing technology for qualitative data analysis. Presentation as part of the symposium “When the data are documents: Bridging quantitative and qualitative methodologies”, *OCIS Division, Academy of Management Conference*, Montréal, PQ, 7–10 August).
- 2010 Shifting boundaries: How should IS researchers study non-organizational uses of ICT? (with B. Fitzgerald, P. Gloor, U. Schultze & Y. Yoo). Panel at the *International Conference on Information Systems (ICIS)*, St. Louis, MO, USA, 12–15 December.
- 2011 Integrated customer-focused knowledge portals: Design challenges and empirical approaches (with C. Loebbecke & N. Friederici). Presentation at the *OCIS Division, Academy of Management Conference*, San Antonio, TX, 12–16 August.
- 2011 Mechanisms for data quality and validation in citizen science (with A. Wiggins, G. Newman & R. D. Stevenson). Presentation at the *Computing for Citizen Science Workshop* at the **IEEE eScience Conference**, Stockholm, Sweden, 8 December.
- 2011 Gaming for (citizen) science: Exploring motivation and data quality in the context of crowdsourced science through the design and evaluation of a social-computational system (with N. Prestopnik). Paper presented at *Computing for Citizen Science Workshop* at the **IEEE eScience Conference**, Stockholm, Sweden, 8 December.

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- 2012 Team dynamics in long-standing technology-supported virtual teams (with N. Misiolek & J. Seymour). Presentation at the *OB Division, Academy of Management Conference*, Boston, MA, 3–7 August.
- 2012 Innovation in academic-industry partnerships: Measuring the challenges to effective performance (with M. B. Watson-Manheim & K. Chudoba). Presentation at the *TIM Division, Academy of Management Conference*, Boston, MA, 3–7 August.
- 2012 Data as an alternative genre for information systems research. In *Alternative genres: Going where no one has gone before* (with M. Avital, O. A. El Sawy, S. Gregor & L. Mathiassen). Panel session at the *International Conference on Information Systems (ICIS 2012)*, Orlando, FL, 16–19 December.
- 2013 Open source software adoption: A technological innovation perspective (with F. Deltour & N. Jullien). Presentation at the *Association Information et Management Conference*, Lyon, France, 23–24 May.
- 2013 Understanding the implicit norms of different Academy of Management divisions (with J. Meuer, W. Felps, P. Chattopadhyay, G. Labianca & W. McKinley). Symposium at the *Academy of Management Conference*, Lake Buena Vista, FL, 9–13 August.
- 2013 Open data. In *Open IS: The IS Discipline as an Open Community Ecosystem* (with J. Feller, M. Germonprez & M. Avital). Panel session at the *International Conference on Information Systems (ICIS 2013)*, Milan, Italy, 15–18 December.
- 2014 Learning and motivation in citizen science (with C. Østerlund, C. B. Jackson, G. Mugar & K. D. V. Hassman). Presentation at the *American Association for the Advancement of Science (AAAS) Annual Meeting*, Chicago, IL, 13–16 February.
- 2014 Socializing the crowd: Learning to talk in citizen science (with C. S. Oesterlund, G. Mugar, C. Jackson & K. D. Hassman). Presentation at the *Academy of Management Conference*, Philadelphia, PA, 2–5 August.
- 2014 Better collaboration plans to enhance collaborative capability (with K. Hall). Presentation at the *Science of Team Science Conference*, Austin, TX, 7–8 August.
- 2014 Experiments in goal setting for citizen science (with C. B. Jackson, G. Mugar, C. Østerlund, & K. D. Hassman). Presentation at the *Conference on Digital Experimentation*, Cambridge, MA, 10–11 October.
- 2015 Project diversity and design implications (with A. Wiggins). Presentation as part of the symposium “Human-centered technologies for citizen science”, *Citizen Science Conference*, San Jose, CA, 11–12 February.
- 2015 Perceived discontinuities and continuities in transdisciplinary scientific groups (with A. Specht, C. Hoover, K. M. Chudoba & M.-B. Watson-Manheim). Presentation at the *Science of Team Science Conference*, Bethesda, MD, 3–5 June.
- 2016 Humans, machines, and the future of citizen science. Presentation at the *AAAI Fall Symposium: Accelerating Science: A Grand Challenge for AI*, Arlington, VA, 18 November.
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- 2016 The hermeneutics of trace data: Building an apparatus (with C. Østerlund & C. Jackson). Presentation at the *IFIP Working Group 8.2 Working Conference (IFIP 8.2)*, Dublin, Ireland, 9–10 December.
- 2017 Work features to support stigmergic coordination in distributed teams (with J. Howison, F. Bolici & C. Østerlund). Presentation at the *Academy of Management Conference*, Atlanta, GA, 4–8 August.
- 2018 Learning in citizen science. Invited presentation at the *Conference on Psychology of Technology*, Stanford, CA, 19 October.

### Poster Presentations

- 1988 Modelling the effects of information technology on organizational structures and processes. Poster session, *Conference on Human Factors in Computing Systems (CHI '88)*, Washington, DC, 15–19 May.
- 2005 Meet me in Cyberspace: Meetings in the distributed work environment (with K. M. Chudoba, M.-B. Watson-Manheim & C. S. Lee). Visual presentation at the *OCIS Division, Academy of Management Conference*, Honolulu, HI, 7–10 August). Winner of OCIS Division Best Visual Presentation Award.
- 2007 A proposed data and analysis archive for research on Free and Open Source Software and its development (with M. Conklin & J. Howison). Poster at the *eSocial Science Conference*, Ann Arbor, MI, 7–9 October.
- 2007 Heckman, R., Crowston, K., Misiolek, N. & Eseryel, Y. Emergent leadership in self-organizing virtual teams (Research-in-progress poster presentation). In *Proceedings of the International Conference on Information Systems (ICIS 2007)*, Montréal, Québec, Canada, 9–12 December. Available from: <http://aisel.aisnet.org/icis2007/60/>.
- 2008 Towards a data and workflow collaboratory for research on Free and Open Source Software and its development (with M. Conklin & J. Howison). Poster at the *iConference*, Los Angeles, CA, 27–29 February).
- 2008 Group maintenance behaviors in self-organizing distributed teams (with R. Heckman, N. Li & M. J. Scialdone). Poster at the *iConference*, Los Angeles, CA, 27–29 February).
- 2008 Asynchronous decision-making in distributed teams (with Q. Li, R. Heckman, E. E. Allen, U. Y. Eseryel, J. Howison, & A. Wiggins). Poster at the *Conference on Computer-Supported Cooperative Work (CSCW)*, San Diego, CA, 8–12 November.
- 2009 Group maintenance behaviors in the decision-making styles of self-organizing distributed teams (with M. J. Scialdone, Q. Li & R. Heckman). Poster at the *iConference*, Chapel Hill, NC, 8–11 February).
- 2009 Appropriate network measures for on-line communities (with F. Bolici & J. Howison). Poster at the *INSNA Annual Conference (Sunbelt XXIX)*, San Diego, CA, 10–15 March.
- 2010 Machine learning and rule-based automated coding of qualitative data (with X. Liu & E. E. Allen). Poster at the *American Society for Information Science and Technology (ASIST) Annual Conference*, Pittsburgh, PA, 23–27 October.



- 2010 A capability maturity model for scientific data management (with J. Qin). Poster at the *American Society for Information Science and Technology (ASIST) Annual Conference*, Pittsburgh, PA, 23–27 October.
- 2010 Educating eScience librarians (with J. Qin, J. D’Ignazio, M. Oakleaf, A. Wiggins, & G. Steinhart). Poster at the *Digital Curation Conference (DCC)*, Chicago, 6–8 December.
- 2014 Semi-automatic content analysis of qualitative data (with J. S. Y. Liew & N. McCracken). Poster at the *iConference*, Berlin, Germany, 4–7 March. Available from: <http://socqa.org/iConf2014>
- 2014 Event-based analysis of a citizen science community: Are new non-sustained users included? (with C. Østerlund, C. B. Jackson, G. Mugar & K. D. V. Hassman). Poster at the *iConference*, Berlin, Germany, 4–7 March.
- 2015 Beyond data management: Exploring new roles for librarians in citizen science projects (with K. Hassman, C. Østerlund, G. Mugar & C. Jackson). Poster presented at the *Citizen Science Conference*, San Jose, CA, 11–12 February.
- 2015 Collaboration planning: Planning for success in team science (with K. L. Hall & A. L. Vogel). Poster at the *Science of Team Science Conference*, Bethesda, MD, 3–5 June.
- 2016 Encouraging work in citizen science: Experiments in goal setting and anchoring (with C. Jackson, G. Mugar and C. Østerlund). Poster at the *ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2016)*, San Francisco, CA, 27 February–2 March. doi: 10.1145/2818052.2869129
- 2016 Humans, machines, and the future of citizen science (with the Gravity Spy Team). Poster at the *De Lange Conference: Humans, Machines and the Future of Work*, Houston, TX, 5–6 December.
- 2017 Gravity Spy: Humans, machines and the future of citizen science (with the Gravity Spy Team). Poster at the *ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2017)*, Portland, OR, 25 February–1 March. doi: 10.1145/3022198.3026335
- 2017 Recruiting messages matter: Message strategies to attract citizen scientists (with T. K. Lee, C. Østerlund, and G. Miller). Poster at the *ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2017)*, Portland, OR, 25 February–1 March. doi: 10.1145/3022198.3026329

### Workshop Presentations

- 1991 A typology of organizational coordination methods. Invited presentation, *TIMS Workshop on Mathematical Organization Theory*, Nashville, TN, 11–12 May.
- 1992 Evolving novel organizational forms. Invited presentation, *TIMS Workshop on Mathematical Organization Theory*, Orlando, FL, 25–26 April.
- 1993 Modelling organizations using ideas from distributed artificial intelligence. Invited presentation, *TIMS Workshop on Computational Organization Theory*, Chicago, IL, 18 May.

- 1994 Using a Process Handbook to design organizational processes (with C. Dellarocas, J. Lee, T. W. Malone, & B. Pentland). In Ingemar Hulthage (Ed.), *Computational Organization Design: Papers from the 1994 Spring Symposium* (Technical Report SS-94-07) (pp. 50-56). Menlo Park, CA: **AAAI Press**. Available from <https://www.aaai.org/Papers/Symposia/Spring/1994/SS-94-07/SS94-07-007.pdf>
- 1994 Crowston, K. Evolving novel organizational forms. In Ingemar Hulthage (Ed.), *Computational Organization Design: Papers from the 1994 Spring Symposium* (Technical Report SS-94-07) (pp. 35-42). Menlo Park, CA: **AAAI Press**. doi: 10.1007/BF00125762
- 1994 Coordinating restaurant service: TGI Friday's process. Invited presentation, *TIMS Workshop on Mathematical and Computational Organization Theory*, Boston, MA, 24-25 April.
- 1994 Electronic communications and new organizational forms. Invited presentation, *Michigan Telecommunications Forum*, Ann Arbor, MI, 9 December.
- 1997 The benefit of cooperation among agents solving travelling salesman's problems. Presentation at the *TIMS Workshop on Computation and Mathematical Organization Theory*, San Diego, CA, 26-27 April.
- 1998 Using computer simulations to study information technology impacts in the real-estate industry. Invited presentation, *Workshop on the Potential of Simulation for the Social Sciences*, University of Surrey, Guildford, England, 14-15 January.
- 2002 Exploring the strengths and limits of Open Source Software engineering processes: A research agenda (with B. Scozzi). Presentation at the 2nd *Workshop on Open Source Software Engineering*, 24th International Conference on Software Engineering. ICSE 2002), Orlando, FL, 25 May.
- 2004 Coordination practices for bug fixing within FLOSS development teams (with B. Scozzi). Presentation at *1st International Workshop on Computer Supported Activity Coordination*, 6th International Conference on Enterprise Information Systems, Porto, Portugal, 14 April.
- \*2004 The perils and pitfalls of mining SourceForge (with J. Howison). Presentation at the *Workshop on Mining Software Repositories*, 26th International Conference on Software Engineering, Edinburgh, Scotland, UK, 25 May.
- 2004 Towards a portfolio of FLOSS project success measures (with H. Annabi, J. Howison and C. Masango). Presentation at the *Workshop on Open Source Software Engineering*, 26th International Conference on Software Engineering, Edinburgh, Scotland, UK, 25 May.
- 2004 A structural model of the dynamics of Free/Libre Open Source Software development teams (with H. Annabi and R. Heckman). Presentation at the *IFIP WG 8.2 OASIS Workshop*, Washington, DC, 12 December.
- 2005 An exploratory study of factors related to effectiveness of Free/Libre Open Source Software teams (with U. Y. Eseryel). Presentation at the *2005 Open Source Software International Symposium*, Padua, Italy, 14-15 April.
- 2005 Collaboration Using OSSmole: A repository of FLOSS data and analyses (with J. Howison & M. Conklin). Presentation at the *Symposium on Mining Software Repositories 2005*, St. Louis, 17 May.

- 2006 How can document-genre metadata improve information-access for large digital collections? (with B. Kwaśnik). Presentation at the **Second International Workshop on Digital Genre**, Halmstad, Sweden, 15–16 June.
- 2009 Coordination without discussion? Socio-technical congruence and Stigmergy in Free and Open Source Software projects (with F. Bolici & J. Howison). Presentation at the *Workshop on Socio-Technical Congruence (STC 2009)*, Vancouver, BC, 19 May.
- 2009 eScience to support research on free/libre/open source software development (with J. Howison & A. Wiggins). Poster at the **eScience Workshop**, Pittsburgh, PA, 15–17 October.
- 2009 Collaborative data analysis with Taverna workflows (with J. Howison & A. Wiggins). Presentation at the **eScience Workshop**, Pittsburgh, PA, 15–17 October.
- 2011 Work as coordination and coordination as work: A process perspective on FLOSS development projects (with C. Østerlund). Presentation at the *International Symposium on Process Organization Studies*, Corfu, Greece, 16–18 June.
- 2012 Motivating citizen scientists with a classification game (with N. Prestopnick & A. Wiggins). Poster at the *National Workshop on Public Participation in Scientific Research (PPSR)*, Portland OR, 4–5 August.
- 2014 Design of an active learning system with human correction for content analysis (with J. L. S. Yan & N. McCracken). Presentation at the **Workshop on Interactive Language Learning, Visualization, and Interfaces**, Annual Meeting of the Association for Computational Linguistics, Baltimore, MD, 26–27 June. Available from: <http://socqa.org/ACL2014>
- 2014 Optimizing features in active machine learning for complex qualitative content analysis analysis (with J. L. S. Yan, N. McCracken & S. Zhou). Presentation at the **Workshop on Language Technologies and Computational Social Science**, Annual Meeting of the Association for Computational Linguistics, Baltimore, MD, 26–27 June.
- 2016 Inter-team coordination in large-scale agile development: A test of organizational discontinuity theory (with K. Chudoba, M. B. Watson-Manheim & P. Rahmati). Presentation at the **Large Scale Agile Development Workshop, XP 2016 Conference**, Edinburgh, Scotland, UK, 24 May. doi: 10.1145/2962695.2962697

### Other Presentations

- 1996 A coordination theory approach to process description and redesign. Invited presentation, **Conference on Management of Advanced Information Technologies**, Syracuse, NY, 17–19 October.
- 2004 Theory for studying effective work practices for Open Source Software development. Invited presentation at **Dagstuhl Perspectives Seminar 04051: Empirical Theory and the Science of Software Engineering**, 25–29 January). Available from [http://drops.dagstuhl.de/opus/volltexte/2006/532/pdf/04051\\_abstracts\\_collection.532.pdf](http://drops.dagstuhl.de/opus/volltexte/2006/532/pdf/04051_abstracts_collection.532.pdf)
- 2013 Peer production, collective intelligence, and open communities: Issues for researchers and educators (with M. Germonprez and J. Feller). Webinar hosted by the Association for Information Systems, 23 April. Available from: <https://www.youtube.com/watch?v=bvL-Cpg4lK8>

- 2013 Response to “Technology and Design for Team Science”. Presentation at the *Workshop on Institutional and Organizational Supports for Team Science*, **National Academies** of Sciences, Engineering and Medicine, 24 October.
- 2013 Assessing research impact. In *The impact of IS research: Is it enough? How do we expand? How do we document?* (with F. Niderman, B. Swanson, H. Krcmar & P. Powell). Senior Scholars’ Symposium at the *International Conference on Information Systems (ICIS 2013)*, Milan, Italy, 15–18 December.
- 2015 Response to “Implications of Team Science for Collaboration Technology”. Presentation at the *Symposium on Enhancing the Effectiveness of Team Science*, **National Academies** of Sciences, Engineering and Medicine, 18 September.
- 2015 Stigmergic coordination for open innovation. Plenary talk at the *13th Open and User Innovation Society Meeting*, Lisbon, Portugal, 13–15 July.
- 2018 The future of work: Intelligent machines, automation and social impacts. South Big Data Innovation Hub webcast. 12 April.

### Patents

- 1998 Malone, T.W., Crowston, K., Lee, J., Pentland, B., & Dellarocas, C. Computer system for displaying representations of processes. US Patent No. 5,819,270 (October 6).
- 1998 Malone, T.W., Crowston, K., Lee, J., Pentland, B., & Dellarocas, C. A computerized handbook of processes. European Patent No. 0692113 (October 14). Canadian Patent No. 2,156,917 (April 22, 2003).
- 2000 Malone, T.W., Crowston, K., Lee, J., Pentland, B., & Dellarocas, C. Computer Handbook of Processes. US Patent No. 6,070,163 (May 30). US Patent No. 6,349,298 (February 19, 2002).

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## TEACHING

### Awards

- 2007 Excellence in Graduate Education Faculty Recognition Award, Syracuse University Graduate School.

### PhD Graduates

Marcel Allbritton (consultant), Hala Annabi (University of Washington), Kangning Wei (Shandong University), James Howison (University of Texas), Andrea Wiggins (University of Maryland), Naybell Hernandez (Utica College).

### Post-Doctoral Advisees

Tae Kyoung Lee (University of Utah), Sangseok You (HEC Paris), Amira Rezgui (Syracuse)

### Degree Courses

Introductory information systems courses at the undergraduate, masters and Ph.D. level.  
Advanced courses in *Database Systems*, *Systems Analysis*, *Information Technology*

*Procurement, Strategic Information Systems. Doctoral seminars in Information, Systems and Organizations and Statistics and Research Methods.*

### Short Courses

- 1993 An introduction to coordination theory (Tutorial, **ICO '93 Conference**, Montreal, 4 May).
- 1993 An introduction to groupware (Class, **Ecole de Printemps 1993**, 3eme Cycle Romand d'Informatique, Anzère, Switzerland). Taught a 2-day course on Groupware for approximately 50 Computer and Information Science faculty from Swiss French universities.
- 1999 & 2003 A coordination theory approach to process modelling and improvement (Seminar, **University of the Republic of San Marino**, 22–24 November 1999; **Polytechnic of Bari**, Italy, 25–26 November 1999; 3–4 November 2003). Taught a 2-day research seminar on process research to doctoral students and junior faculty.
- 2002 & 2009 Qualitative research methods (Seminar, **Polytechnic of Bari** at Taranto, Italy, 11–12 March 2002; **Polytechnic of Bari**, 4–5 May 2009). Taught a 2-day course on qualitative research methods to engineering Ph.D. students.
- 2005 Coordination in organizations (Lecturer for **Autumn School in Management Engineering**, Brixen/Bressanone Italy, 13 September).
- 2007 & 2009 Networks and collaborative production; Free/libre open source software (Lecturer, **E-Gov program**, 22 May 2007; 26 May 2009). Taught 2 classes for e-Gov certificate students.
- 2007 Introduction to data analysis (Lecturer for **International School of Information Management**, Mysore, India, 17 October–8 November). Taught 4-week course on basic data collection and statistical analysis for masters students.
- 2008 eScience (Class, **Scuola Interpoltecnica Di Dottorato**, Bari, Italy, 10–11 April). Taught a 2-day course on eScience to engineering Ph.D. students.
- 2008 Learning in virtual teams (Lecturer, **Advanced International Summer School**, Ostuni, Italy, 3–5 July). Taught session for summer school for engineering management Ph.D. students.
- 2010 Social network analysis (Class, **International School of Information Management**, University of Mysore, Mysore, India, 7–9 April). Taught a 3-day course on SNA to students and executives.
- 2015 Introduction to social network analysis (Summer School Class, **Department of Informatics, University of Zürich**, Zürich, Switzerland, 23 June). Taught one-day introductory class on SNA to PhD students.
- 2017 Organizational design in the age of AI (**Cassino University**, Cassino, Italy, 19 May–5 June). Taught short course for masters students.

### Other Teaching-related Activities

- 1994 Faculty Advisor, India Telecommunications Team, **William Davidson Institute**, University of Michigan, Summer. Advised 4-member MBA team on 3-month study of Indian Telecommunications industry.

2007–2016 Member, Scientific Committee of the **Scuola Interpolitecnica di Dottorato**. Inter-polytechnic Doctoral School, Italy).

Senior faculty member, **Research Institute for the Science of Socio-Technical Systems** (Inaugural session, Ann Arbor, MI, 20–25 July 2008; Santa Fe, NM, 29 July–1 August 2012).

Faculty member for doctoral consortia at the **iConference** (Ann Arbor, MI, 14–15 October 2006; Los Angeles, CA, 27 February 2008); **OSS Conference** (Notre Dame, IN, 30 May 2010; Gothenberg, Sweden 30 May 2016); **Academy of Management OCIS** (Montreal, PQ, 6 August 2010); **Hawai'i International Conference on System Sciences (HICSS)** (Waikoloa, HI, 3 January 2017).

Chair of doctoral consortia for the **Wikisym Conference** (Gdansk, Poland, 11 June 2010); **Academy of Management OCIS** (San Antonio, TX, 12 August 2011) and co-Chair, **iConference** (Wuhan, China, 25 March 2017 and Sheffield, UK, 25 March 2018).

Chair of mid-career consortium for the **International Conference on Information Systems**, San Francisco, CA, 13 December 2018.

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## PROFESSIONAL ACTIVITIES

### Elected Leadership Positions in Disciplinary Organizations

International Federation for Information Processing. (IFIP) **Working Group 8.2** on Information Systems and Organizations. Webmaster, 1997–. **Secretary**, 2008–2011. **Vice-chair**, 2011–2013. **Chair**, 2013–2015.

Organizational Communications and Information Systems Division (**OCIS**), Academy of Management. **PDW and Doctoral Consortium Chair**, 2010–2011. **Program Chair**, 2011–2012. **Division Chair**, 2013–2014.

### Service Awards

2004 **Outstanding Service Award**, International Federation for Information Processing (**IFIP**).

2016 **Silver Core Award**, International Federation for Information Processing (**IFIP**).

2018 **Lifetime Service Award**, Organizational Communications and Information Systems Division (**OCIS**), Academy of Management.

### Editorial Positions

**co-Editor-in-Chief**, *Information, Technology and People* (2008–). Associate editor, 1997–2008. Web editor, 1997–2003.

Rankings: Association of Business Schools: 3. Australian Business Deans Council: A.

**Editor-in-chief**, *ACM Transactions on Social Computing* (2017–). **Associate Editor** (2016–2017).

**Senior Editor**, *Journal of Information Technology Theory and Application (JITTA)* (2008–2015), *Information & Management (I&M)* (2012–2013).

**Member of editorial board**, *Human Computation* (2015–), *Organizational Design and Enterprise Engineering* (2016–), *Electronic Journal of Organizational Virtualness* (1999–2009).

**Organizer**, FLOSShub (<http://flosshub.org/>), a repository of working papers and other resources for research on FLOSS.

**Co-Editor**, *Sprouts Working Papers on Information System* (<http://sprouts.aisnet.org/>).

**Guest editor**, *Journal of the Association for Information System*, Special issue on Empirical Research on Free/Libre Open Source Software (FLOSS) (2010).

**Outside reviewer** for *Management Science*, *Information Systems Research*, *MIS Quarterly*, *IEEE Transactions on Software Engineering*, *ACM Transactions on Information Systems*, the US National Science Foundation, Science Foundation Ireland and numerous other organizations, journals and conferences.

### Positions in Workshops and Conferences

- 1992 **Organizer** (with Brian Pentland), University of Michigan ICOS *Working Conference on Generative Theories of Organization*, 17–19 January. Organized 3-day working conference for researchers interested in generative models.
- 1992–1993 **Organizer**, University of Michigan ISEF *Special interest group on Business Process Redesign*. Organized bi-annual 1-day meetings for members of industry associates group.
- 1994 & 2001 **Organizer**, *IFIP Working Group 8.2, Oasis '94 Workshop*, Vancouver, BC, 17 December 1994; New Orleans, LA, 16 December 2001 (with Joe Nandhakumar & John Venable). Organized 1-day workshop for researchers on Information Systems and Organizations.
- 1994 **Organizer** (with Robert Halperin & Jin-tae Lee), *CSCW Workshop, The cobbler's children: How can and should we use CSCW tools in our own work?*, 22 October. Organized 1–day workshop on CSCW support for CSCW research community.
- 1997 **Organizer** (with Bernard Katzy), *Workshop on Virtual Operations and Agile Organizations*, Rotterdam, The Netherlands, 23 August. Organized two-day workshop for European researchers.
- 2004–2013 **Chair**, Hawai'i International Conference on System Science Mini-track. *Genre of Digital Documents*, 2004 & 2005 (with Barbara Kwaśnik); 2007 (with Dmitri Roussinov & Carina Ihlström); 2008 (with Carina Ihlström Eriksson & Tero Päivärinta). *Studies of Open Source Software Development/Open Movements*, 2005–2008 (with Hala Annabi); 2009 (with Felipe Ortega); 2010 (with Felipe Ortega & Vandana Singh). *Classification of Digital Documents*, 2009 (with Barbara Kwaśnik). *Working Documents & Documenting Work*, 2010–2012 (with Carsten Østerlund). *Open Movements*, 2011 (with Wolfgang Bein, Clinton Jeffery & Felipe Ortega); 2012–2013 (with Wolfgang Bein & Clinton Jeffery).
- 2006 **Panels Chair** and member of organizing committee. *OSS 2006 Conference*, Como, Italy, June.

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- 2006 **Chair** (with Joel West), *Open Source Software Research Development Workshop*, Professional Development Workshop, Academy of Management Conference, Atlanta, GA, August.
- 2007 **Program co-Chair** (with Sandra Sieber), *IFIP Working Group 8.2 Working Conference on Virtuality and Virtualness*, Portland, OR, USA, 29–31 July.
- 2009 **Program co-Chair** (with Cornelia Boldyreff), *IFIP Working Group 2.13 Working Conference on Open Source Software*, Skövde, Sweden, 4–7 June. Proceedings doi: 10.1007/978-3-642-02032-2.
- 2010 **PDW and Doctoral Consortium Chair**, *Organizational Communications and Information Systems Division, Academy of Management Conference*, San Antonio, TX, 12–16 August.
- 2010 **Track co-Chair** (with Francesco Bolici), *Open Source and the Open Collaboration Process Track, International Conference on Information System*, St. Louis, MO, 11–15 December.
- 2011 **Track co-Chair** (with Patrick Chau), *Theme Track (East Meets West: Connectivity and Collaboration through Effective Information Systems)*, *International Conference on Information System*, Shanghai, China, 4–7 December.
- 2012 **Program Chair**, *Organizational Communications and Information Systems Division, Academy of Management Conference*, Boston, MA, 4–7 August.
- 2013 **Program co-Chair** (with Martin Halbert), *iConference 2013*, Fort Worth, TX, 12–15 February.
- 2013– **Track co-Chair** (with Karine Nahon), *Digital and Social Media Track, Hawai'i International Conference on System Science (HICSS)*.
- 2014 **Track co-Chair** (with Dov Te'eni), *Panels Track, International Conference on Information Systems (ICIS 2014)*, Auckland, New Zealand, 14–17 December.
- 2015 **Track Chair**, *Wikis and Open Collaboration Research Track, OpenSym*, San Francisco, CA, 19–21 August.
- 2015 **Program co-Chair** (with Jan Pries-Heje, Jan Devos, George Kasper & Isabel Ramos), *Big Data Information Systems Track, IFIP World Computer Congress*, Daejeon, Korea, 4–7 October.
- 2016 **General co-Chair** (with Imed Hammouda), *IFIP Working Group 2.13 Working Conference on Open Source Systems (OSS 2016)*, Gothenburg, Sweden, 30 May–2 June.
- 2018 **Organizer** (with Mary Beth Watson-Manheim, Ingrid Erickson & Jeffrey Nickerson), *Academy of Management PDW on Work in the Age of Intelligent Machines: Towards Disciplinary Convergence*, Chicago, IL, 11 August.
- 2019 **General co-Chair** (with Wayne Lutters & Mega Subramaniam), *iConference*, College Park, MD, USA.
- 2019 **Track co-Chair** (with Gerhard Schwabe & Daning Hu), *Design Science Research Track, International Conference on Information Systems (ICIS)*, Munich, Germany.
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2019 **Program chair** (with Tawanna Dillahunt & Elizabeth Gerber), *Human Computer Interaction Consortium Workshop*, Pajaro Dunes, Watsonville, CA.

### Advisory Committees

2015– **Member**, Advisory Board, Department of Informatics, University of Zürich.

2017–2019 **Member**, Steering Committee, ACM SIGCHI CSCW Conference.

2018– **Member**, Steering Committee of the National Research Programme on “Digital Transformation”, Swiss National Science Foundation.

### University Administrative Responsibilities

#### *School of Information Studies*

**Personnel Committee. Member**, 1997–1998, 2011–2012. **Co-chair**, 2011–12.

**Faculty Search Committees. Member**, 1997–2002, 2006–2009. **Chair** 2001–2002, 2008–2009, 2018–2019. **Dean Search Committee, Member**, 2006–2008.

**Director, PhD Program** in Information Transfer/Information Science & Technology, 2001–2006. Oversaw admissions and program administration. Participated in all student reviews and advancements to candidacy. Revised program regulations.

#### *Syracuse University*

**Faculty Senate, Elected Member**, 1999–2007

**Subcommittee on Curriculum** (1999–2003). **Subcommittee on Administrative Operations** (2003–2004). **Subcommittee on Computing Services** (2004–2006); **Chair** (2005–2006).

**Subcommittee on Academic Affairs** (2006–2007).

### Membership in Professional Associations

**Member** of the Academy of Management, IFIP Working Groups 8.2 & 2.13, the Association for Information Systems (AIS) and the Association for Computing Machinery (ACM).

### Other Activities

1996– **Principal, Web Arch LLC**, a consulting firm specializing in Web site and information access design (<http://www.web-arch.com/>).