

---

## Objective

Pursue world-class research, teaching and service in a top research university. My research examines the impact of technology on organizing, especially new ways to reduce the trade offs between individual and collaborative work. My teaching helps students build a strategic understanding of information systems inside and across organizations.

---

## Current Position

January 2009–  
**Post-doctoral Associate**  
**Carnegie Mellon Computer Science**  
Mentor:  
**James D. Herbsleb**

Co-PI on NSF Grant (OCI/VOSS) (2009–2012, \$400k) Socio-technical Ecosystems for Software Development in Science  
Co-PI on NSF Grant (SciSIP) (2012–2014, \$580k) The Scientific Software Network Map

---

## Qualifications

Awarded May 2009  
**PhD Information Science and Technology**  
**Syracuse University Information Studies**  
Advisor:  
**Kevin Crowston**

**Dissertation:** Alone Together: A socio-technical theory of motivation, coordination and collaboration technologies in organizing for free and open source software development  
2009 Syracuse Graduate School Doctoral Prize  
2007 Selected for ICIS doctoral consortium  
2007 Consortium for the Science of Sociotechnical Systems  
2006 3<sup>rd</sup> Prize Syracuse University Business Plan Competition  
2006 Best paper award IFIP Open Source Research Conf.  
2005 Jeffrey Katzer Memorial Doctoral Fellowship  
2009 Committee: Kevin Crowston, Robert Heckman, Carsten Østerlund and Donald Harter (School of Management)  
2010 ICIS Dissertation Award (first runner up)  
2010 Best single authored paper derived from a dissertation Academy of Management OCIS division.  
Contributed to 8 NSF proposals, some multi-institutional, of which 3 received funding (with Kevin Crowston as PI).

1994–1998  
**B. Economics (Social Sciences) Honours**  
University of Sydney, Australia  
Double major in Economics as a Social Science and Government

---

## Representative Research

Howison, J and Herbsleb, J (2011) Scientific software production: incentives and collaboration. **ACM Computer Supported Cooperative Work 2011**.  
Crowston, K., Wei, K, Howison, J., and Wiggins, A. (2011). Free/Libre Open Source Software Development: What We Know and What We Do Not Know. **ACM Computing Surveys**. Forthcoming

Howison, J and Crowston, K (under review) Collaboration through superposition: How the IT artifact as an object of collaboration affords technical interdependence without organizational interdependence. Under first-round revision at **Management Information Systems Quarterly (MISQ)**.  
Howison, J., Inoue, K., and Crowston, K. (2006). Social dynamics of free and open source team communications. In Proceedings of **IFIP 2nd International Conference on Open Source Software**. Best paper award.

4 papers under review or in preparation, 10 Journal papers, 22 Conference/Book chapters, 9 Workshop papers (See pages 2 and 3)

---

## Key Teaching, Service and Professional Experience

**Key Teaching Experience** (See page 4)  
Instructor for IST 754 *Cost Models* (for technology management decision making). Syracuse University (taught online).  
Lecturer for two sections of 40 students *English for Engineering* (Changmai University, Thailand)  
Supervised Masters & Undergraduate students in research on Wireless Grid computing for VC presentation.

**Key Professional Experience** (See page 5)  
2001–2002 Management Consultant, Control Risks Group (Corp. Due Diligence and Crisis Management)  
1999-2000 Asia focused Non-Profits (Education for Burmese Refugees/APEC Telecom Industry Association)  
1996–1998 Consultant KPMG Management Consulting (MIS system selection)

**Key Service** Ad-hoc reviewer inc. Management Science, MISQ, Information and Organization, ACM TSE, Social Networks, ICIS, AoM OCIS, CSCW, CHI.

**Key Industry Engagement** Research-based tutorials at O'Reilly Emerging Technology, Open Source, FOOCamp, LinuxWorld Asia. Research-based consulting for VCs.

---

Peer Reviewed Presentations and Publications

---

5 papers under review or in preparation, 10 Journal papers, 22 Conference papers/presentations, 10 Workshop papers/Book Chapters.  
3 Best paper awards (marked by \*).

---

Under Review and in Preparation

---

1. Howison, J, Wiggins, A and Crowston, K (under review) Validity issues in the use of social network analysis for the study of online communities. Under third round review at *Journal for the Association of Information Systems (JAIS)*.
2. Howison, J and Crowston, K (under revision) Collaboration through superposition: How the IT artifact as an object of collaboration affords technical interdependence without organizational interdependence. *Under first-round revision at MISQ*
3. Howison, J and Herbsleb, J (2011) Sharing the spoils of system improvement: modularity and incentives. *To be presented on Panel at Industry Studies 2011*.
4. Howison, J, Olson, J, Kittur, A and Carley, K (in preparation) Motivation through visibility in open contribution systems. In Preparation.
5. Bolici, F, Howison, J and Crowston, K (in preparation) The under-appreciated role of stigmergic coordination in software development. Working Paper.

---

Journals

---

1. Crowston, K., Wei, K, Howison, J., and Wiggins, A. (2011). Free/libre open source software development: what we know and what we do not know. *ACM Computing Surveys*. Forthcoming.
2. Crowston, K., Howison, J., Eseryel, U. Y., and Masango, C. (2007). The role of face-to-face meetings in technology-supported self-organizing distributed teams. *IEEE Transactions on Professional Communications*, 50(3):185-203.
3. Crowston, K., Li, Q., Wei, K., Eseryel, U. Y., and Howison, J. (2007). Self-organization of teams for free/libre open source software development. *Information and Software Technology*, 49(6):564-575.
4. Howison, J., Conklin, M., and Crowston, K. (2006). FLOSSmole: A collaborative repository for FLOSS research data and analysis. *International Journal of Information Technology and Web Engineering*. 1(3):17-26. 55 Google Scholar cites.
5. Crowston, K., Howison, J., and Annabi, H. (2006). Information systems success in free and open source software development: Theory and measures. *Software Process: Improvement and Practice*, (11)2 :123-148. 79 Google Scholar cites.
6. Crowston, K. and Howison, J. (2006). Assessing the health of open source communities. *IEEE Computer*, 39(5):89-91.
7. Crowston, K. and Howison, J. (2006). Hierarchy and centralization in free and open source software team communications. *Knowledge, Technology and Policy*, 18(4): 65-85.
8. Crowston, K. and Howison, J. (2005). The social structure of open source software development teams. *First Monday*, 10(26). 172 Google Scholar cites
9. McKnight, L. W., Howison, J., and Bradner, S. (2004) Wireless grids: Distributed resource sharing by mobile, nomadic and fixed devices. *IEEE Internet Computing*, 8(4):24-31. 20 Citations in Web of Science.
10. Burns, M. and Howison, J. (2001) Napster fabbing: Internet delivery of physical products. *Rapid Prototyping Journal*, 7(4):194-196.

---

Conferences

---

1. Howison, J and Herbsleb, J (2011) Scientific software production: incentives and collaboration. **ACM Computer Supported Cooperative Work 2011**
2. Howison, J (2010) Layered Collaboration: A sociotechnical theory of organization in open source software development *Academy of Management OCIS Presentation*. \*OCIS division award for best single-authored paper derived from a dissertation.
3. Crowston, K., Wiggins, A., and Howison, J. (2010). Analyzing leadership dynamics in distributed group communication. In *Proceedings of Hawaii Information Conference on System Science (HICSS)*, Hawaii.
4. Li, Q., Heckman, R., Allen, E., Crowston, K., Eseryel, U. Y., Howison, J., and Wiggins, A. (2008). Asynchronous decision-making in distributed teams (poster presentation). In *Computer Supported Collaborative Work*.
5. Andrea Wiggins, James Howison & Kevin Crowston (2009) Heartbeat: Measuring active user base and potential user interest in FLOSS projects. *Proceedings of the Fifth International Conference on Open Source Software (IFIP 2.13)*.
6. Crowston, K., Howison, J., and Wiggins, A. (2008). eSocial science for free/libre open source software researchers. In *Proceedings of the 4th International Conference on eSocial Science*, Manchester, UK.
7. Howison, J., Wiggins, A., and Crowston, K. (2008). eResearch workflows for studying free and open source software development. In *Proceedings of the Fourth International Conference on Open Source Software (IFIP 2.13)*.

8. Wiggins, A., Howison, J., and Crowston, K. (2008). Social dynamics of FLOSS team communication across channels. In *Proceedings of the Fourth International Conference on Open Source Software (IFIP 2.13)*, Milan, Italy.
9. Scialdone, M., Li, N., Howison, J., Heckman, R., and Crowston, K. (2008). Group maintenance in technology-supported distributed teams. In *Best Paper Proceedings of Academy of Management Annual Meeting*. \*
10. McKnight, L., Lehr, W and Howison, J. (2007) Coordinating user and device behavior in wireless grids. in Fitzek, Frank H.P.; Katz, Marcos D. (Eds.) *Cognitive Wireless Networks: Concepts, Methodologies and Visions Inspiring the Age of Enlightenment of Wireless Communications*. Springer.
11. Heckman, R., Crowston, K., Li, Q., Allen, E., Eseryel, U. Y., Howison, J., and Wei, K. (2006). Emergent decision-making practices in technology-supported self-organizing distributed teams. In *International Conference on Information Systems (ICIS 2006)*.
12. Li, Q., Crowston, K., Heckman, R., and Howison, J. (2006). Language and power in self-organizing distributed teams. In *Academy of Management, OCIS division, Interactive presentation*.
13. Howison, J., Inoue, K., and Crowston, K. (2006). Social dynamics of free and open source team communications. In Proceedings of the *IFIP 2nd International Conference on Open Source Software*, Lake Como, Italy. \*Received a best paper award
14. Cogburn, D. L., Johnsen, J. F., Bhattacharyya, S., Sharif, R. M., and Howison, J. (2006). Distributed deliberative citizens: Exploring the impact of collaboratories on transnational NGO network participation in WSIS. In *Proceedings of the 2006 International Communications Association (ICA) Conference of the Americas*, Lima, Peru. August 3-5.
15. Crowston, K., Wei, K., Li, Q., and Howison, J. (2006). Core and periphery in free/libre and open source software team communications. In *Proceedings of the 38th Annual Hawaii International Conference on System Sciences (HICSS)*.
16. Crowston, K., Wei, K., Li, Q., Eseryel, U. Y., and Howison, J. (2005c). Coordination of free/libre and open source software development. In *Proceedings of International Conference on Information Systems (ICIS) 2005*.
17. Crowston, K., Howison, J., Masango, C., and Eseryel, Y. U. (2005b). Face-to-face interactions in self-organizing distributed teams. Presented at *the Organization, Communication and Information Systems (OCIS) division, Academy of Management Conference*. Hawaii, USA.
18. Goodrum, A. and Howison, J. (2005). Why can't I manage images like MP3s: The evolution and intent of citation metadata standards. In *IS&T/SPIE 2005 (Electronic Imaging)*.
19. Crowston, K., Annabi, H., Howison, J., and Masango, C. (2005a). Effective work practices for FLOSS development: A model and propositions. In *Proc. of Hawaii International Conference On System Sciences (HICSS)*.
20. Howison, J., Conklin, M. S., and Crowston, K. (2005). OSSmole: A collaborative repository for FLOSS research data and analyses. In *Proc. of 1st International Conference on Open Source Software*, Genova, Italy.
21. Howison, J. and Goodrum, A. (2004). Why can't I manage academic papers like MP3s? The evolution and intent of metadata standards. In *Proceedings of the 2004 Colleges, Code and Intellectual Property Conference*, number 57 in *ACRL Publications in Librarianship*, College Park, MD.
22. Crowston, K., Annabi, H., and Howison, J. (2003). Defining open source software project success. In *Proc. of International Conference on Information Systems (ICIS 2003)*. 16% accept rate, 139 Google Scholar cites.

#### Workshops and Book Chapters

---

1. Howison, J and Herbsleb, J D (2010) Socio-technical logics of correctness in the scientific software development ecosystem. **Workshop on Dynamics of Scientific Collaboration at CSCW 2010**.
2. Crowston, K., Rubleske, J., and Howison, J. (2006). Coordination theory and its application in HCI. In Zhang, P. and Galletta, D., editors, *Human-Computer Interaction in Management Information Systems: Foundations, Advances in Management Information Systems Series*, pages 120–138. M. E. Sharpe, Inc.
3. Conklin, M. S., Howison, J., and Crowston, K. (2005). Collaboration using OSSmole: a repository of FLOSS data and analyses. In *Proc. of Mining Software Repositories (MSR) Workshop at International Conference on Software Engineering (ICSE)*, St Louis, Missouri.
4. Crowston, K., Annabi, H., Howison, J., and Masango, C. (2004a). Effective work practices for FLOSS development: A model and propositions. In *Proc. of AIS Sponsored Theory Development Workshop at ICIS 2004*.
5. Crowston, K., Annabi, H., Howison, J., and Masango, C. (2004b). Effective work practices for FLOSS development: A model and propositions. In *Proc. of Workshop on Interdisciplinary Software Engineering Research (WISER) at ACM SIGSOFT 2004*.
6. Crowston, K., Annabi, H., Howison, J., and Masango, C. (2004c). Towards a portfolio of FLOSS project success measures. In *Proc. of the Open Source Workshop of the International Conference on Software Engineering (ICSE 2004)*.

7. Howison, J. and Crowston, K. (2004a). The perils and pitfalls of mining Sourceforge. In *Proc. of Workshop on Mining Software Repositories at the International Conference on Software Engineering ICSE*. 88 Google Scholar cites.
8. Howison, J. and Crowston, K. (2004b). Studying free software with free software and free methods. In *1st Australian Open Source Development Conference*.
9. Crowston, K. and Howison, J. (2003). The social structure of open source software development teams. In *OASIS 2003 Workshop (IFIP 8.2 WG)*.
10. Howison, J. (2003). The role of reputation in virtual markets for wireless grids. In position papers of *The NSF Interdisciplinary Symposium on Reputation Mechanisms in Online Communities*, MIT, Cambridge, MA, USA

## Patent Applications

---

- 2009 Grandinetti, D., Howison, J. and Molloy, I. System And Method For Distributed Audio Recording And Collaborative Mixing. WO/2009/026347. Assigned to Syracuse University and Wireless Grids Corporation, derived from Wireless Grids research with Lee McKnight. Under review.

## Invited Presentations

---

- 2010 University of Pittsburgh, Katz School of Business, Information Systems Symposium. Host: Sherae Daniel  
 2009 Case Western Reserve University, Weatherhead School of Management, Information Systems Symposium. Host: Kalle Lyytinen  
 2009 University of Pittsburgh, Information School. Host: Ronald Larson

## Grant Experience

---

### As co-PI and major author

- 2010 James D Herbsleb (PI) and James Howison (co-PI) "The Scientific Software Map" NSF OCI Science of Science Policy (SciSIP). Under review. \$650,000.  
 2009 James D Herbsleb (PI) and James Howison (co-PI) "Socio-technical ecosystems for scientific software development" NSF OCI Virtual Organizations as Sociotechnical Systems (VOSS). Awarded. 09-43168, \$400,000.

### As contributor

- 2007 Kevin Crowston (PI) and Megan Conklin (co-PI) "Data and Analysis Archive for Research on Free and Open Source Software and Its Development" NSF CISE Computational Research Infrastructure (CRI). Awarded. Collaborative Research, Syracuse 07-08437 \$100,000; Elon 07-08767 \$116,000.  
 2005 Kevin Crowston (PI), Robert Heckman (co-PI), Elizabeth Liddy (co-PI) "Investigating the Dynamics of Free/Libre Open Source Software Development Teams" Awarded. 05-27457, \$714,370.  
 2004 Effective work practices for Free and Open Source Software development NSF CISE Information & Intelligent Systems (IIS) Awarded. 04-14468, \$327,026. Planning Grant: 03-41475, \$12,052.

## Teaching

---

### Instructor

- 2006 IST 754 *Cost Models* (for technology management decision making). Fall 2006. Syracuse University School of Information Studies (online). Evaluations available on request.  
 1999 Lecturer for *English for Engineering* to 2 sections of 40 engineering students at Changmai University, Thailand.  
 1999 Designed and taught Advanced Conversational English course Changmai University, Thailand.

### Guest Lectures

- 2010 *Asking Online Questions that Get Answered* CMU HCI 05-320 **Social Web**  
 2009 *Interacting with Open Source Projects* CMU MSE 17-652 **Methods: Deciding What to Design**  
 2009 *Interacting with Open Source Projects* Maryland College of Information Studies INFM 741 **Social Computing Technologies and Applications**  
 2009 *Asking Online Questions that Get Answered* Maryland College of Information Studies INFM 718 **Knowledge Management**  
 2006 *Object oriented system analysis* Syracuse Information Studies IST 552 **Systems Analysis**  
 2004 *Introduction to Grid Computing* Syracuse Information Studies IST 621 (**Information Systems Introduction Course**)  
 2004 *Strategic Free and Open Source Software* Syracuse Information Studies IST 621 (**Information Systems Introduction Course**)

### Other

- 2005 Workshop on Web mining with Perl. 15 students, 4 classes over 2 weeks. Prepared and taught. Syracuse Information School Doctoral Program.
- 2005 Supervised Masters & Undergraduate students in research on Wireless Grid computing for presentation. Development of research prototype system for presentation to NSF funders, Congressmen and Venture Capitalists.

### Industry Presentations

---

- 2006 Presented Tutorial *Open Source and Business* at O'Reilly Open Source Conference
- 2006 Presented Tutorial on *Open Source Communities* at LinuxWorld Asia
- 2005 Presenter/Participant at 2005 O'Reilly FOOCamp
- 2001 Presented on *Napster Fabbing* at O'Reilly Peer to Peer (Emerging Technology) Conference

### Professional Service

---

#### Journal

Management Science (reviewer)  
 MIS Quarterly (reviewer)  
 Information and Organization (reviewer)  
 ACM Transactions on MIS (reviewer)  
 CAIS (reviewer)  
 JAIS (reviewer)  
 IEEE Transactions on Software Engineering (reviewer)  
 ACM TOSEM (reviewer)  
 Social Networks (reviewer)

#### Conference

Program Committee: Wikisym 2011  
 Program Committee: CHI Works-in-progress 2011  
 Associate Editor for OCIS Division AoM  
 Discussant for OCIS Division AoM  
  
 Computer Support Collaborative Work (reviewer)  
 CHI (reviewer)  
 HICSS (reviewer)  
 Australian Conference on Information Systems (reviewer)

**Other Service:** Co-founded FLOSSmole data repository

### Professional Experience

---

- 2006-2007 **Research Consultant, Charles River Venture Capital**, Boston MA  
 Prepared research based presentation to VC board on Free and Open Source Software space. Prepared ad-hoc reports on open source projects for background in investment decisions. "Cool spotting" for new technology ventures (esp. long-tail e-tail).
- 2001-2002 **Consultant, Control Risks Group**, Sydney, Australia  
 Control Risks is a London-based global business risk consultancy specializing in Political & Security Risks, Crisis Management, Investigations and IT Security. In addition to consulting in the general practice I had responsibility for the online political risk product in Australia and the Pacific.
- 2000 **Project Officer, PECC/TIFF**, Los Angeles, USA  
 Project Officer, Pacific Economic Cooperation Council's Telecommunications and Information Industries Forum (PECC/TIIF) a Pacific Rim region non-profit trade and development promotion council. Gained skills in managing work requirements in an internationally distributed workplace, developed knowledge of information industries in the region. Responsibilities include coordinating IT Skills & Training alliance, PECC delegation to APEC Ministerial Meeting, research and drafting presentations at intergovernmental and industry meetings.
- 1999 **Research, Asian Forum on Human Rights and Development**, Bangkok, Thailand  
 Coordinated logistics for a conference on human rights campaigning for internally displaced peoples. Produced report for UN meeting including analysis, case studies and campaigning strategies.
- 1999 **Editor and Assessor, DEP**, Chiangmai, Thailand  
 Editor and Assessor for Distance Education Program, an independent NGO providing distance education to Burmese refugees.
- 1996-1998 **Consultant KPMG Management Consulting**, Sydney, Australia  
 Secretary for the Management Consulting Business Development Working Group. Worked closely with the Chairperson to organize and coordinate meetings and provide research support. Researched and wrote reports for national management consulting committee. Reports included critique of KPMG's international electronic networking arrangements

### Organizational Memberships

---

- Academy of Management (OCIS division)
- Association for Information Systems (AIS)
- American Association for Information Science and Technology (ASIST)

- Electronic Freedom Foundation (EFF)
- Free Software Foundation (FSF)

### Technical Skills

---

- Programming in Ruby (on Rails), R statistics, Perl, Java, C/C++. Familiarity with Linux system administration.

### Interests and Sports

---

- Free and Open Source Software: Developer on Bibdesk, a free software reference manager
- Sports: Skiing (represented University of Sydney), Sailing: Etchells and Sydney 38, offshore/inshore race experience, Squash (Secretary of Syracuse University squash club), Golf.

### Citizenship

---

Citizen of Australia and United Kingdom.

Currently hold and eligible for continued E3 visa (H1-B equivalent for Australian citizens)

### Referees

---

**James D. Herbsleb**  
Professor  
Institute for Software Research  
School of Computer Science  
Carnegie Mellon University  
jdh@cs.cmu.edu

*Post-doctoral mentor, PI on SciSoft grant and co-author.*

**Kevin Crowston**  
Professor  
School of Information Studies  
Syracuse University  
crowston@syr.edu

*Ph.D. Advisor, PI on FLOSS grants, co-author.*

**Robert Heckman**  
Associate Dean  
School of Information Studies  
Syracuse University  
rheckman@syr.edu

*Co-PI on FLOSS grant, co-author and teaching mentor.*