

# MATTHEW J. BIETZ

## CURRICULUM VITAE

Department of Informatics  
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### Current Positions

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*Assistant Project Scientist*, Department of Informatics, University of California, Irvine (2010 - present)  
Hana Laboratory (Judy Olson & Gary Olson, PIs)  
CRADL: Collaboration Research in Action, Design, and Learning Laboratory (David Redmiles, PI)

*Affiliate Assistant Professor*, Department of Human Centered Design & Engineering, University of Washington (2010 - present)  
Computer Supported Collaboration Laboratory (Charlotte Lee, PI)

### Education

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- 2008      *Ph.D. in Information*  
University of Michigan School of Information, Ann Arbor, MI  
  
Dissertation: "Interactivity and Electronic Communication: An Experimental Study of Mediated Feedback"  
  
Dissertation Committee:  
    Dr. Gary M. Olson, School of Information (Chair)  
    Dr. Judith S. Olson, School of Information  
    Dr. Michael D. Cohen, School of Information  
    Dr. Jason D. Owen-Smith, Sociology & Organizational Studies
- 2000      *M.S. in Information*  
University of Michigan School of Information, Ann Arbor, MI
- 1997      *M.A. in Historical Musicology*  
State University of New York at Stony Brook, Stony Brook, NY  
  
Thesis: "Remembering in Frederic Rzewski's *The People United Will Never Be Defeated*"
- 1995      *B.A. in English, cum laude*  
*B.Mus. in Cello Performance, cum laude*  
Lawrence University, Appleton, WI

## Journal Publications

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Bietz, M. J., Lee, C. P., & Baumer, E. P. S. (2010). Synergizing in cyberinfrastructure development. *Computer Supported Cooperative Work*, 19(3-4), 245-281.

Special Issue: Sociotechnical Studies of Cyberinfrastructure and e-Research: Supporting Collaborative Research. (2010). Charlotte P. Lee, David Ribes, Matthew J. Bietz, Helena Karasti and Marina Jirotko, eds. *Computer Supported Cooperative Work*, 19(3-4).

## Refereed Conference Publications

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Bietz, M. J., & Lee, C. P. (2012). Adapting cyberinfrastructure to new science: Tensions and strategies. *Proceedings of the 2012 iConference* (pp. 183-190). New York: ACM Press. (Acceptance rate: 32%)

Bietz, M. J., Ferro, T., & Lee, C. P. (2012). Sustaining the development of cyberinfrastructure: An organization adapting to change. *CSCW '12: Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work* (pp. 901-910). New York: ACM. (Acceptance rate: 40%<sup>1</sup>; Best Paper Award Honorable Mention)

Lee, C. P., Bietz, M. J., Derthick, K., & Paine, D. (2012). A Sociotechnical Exploration of Infrastructural Middleware Development. *CSCW '12: Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work* (pp. 1347-1350). New York: ACM. (Acceptance rate: 40%<sup>1</sup>; Best Paper Award Nominee)

Thayer, A., Bietz, M. J., Derthick, K., & Lee, C. P. (2012). I love you, let's share calendars: Calendar sharing as relationship work. *CSCW '12: Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work* (pp. 749-758). New York: ACM. (Acceptance rate: 40%<sup>1</sup>)

Lee, C. P., Bietz, M. J., & Thayer, A. (2010). Research-driven stakeholders in cyberinfrastructure use and development. *Proceedings of the 2010 International Symposium on Collaborative Technologies and Systems* (pp. 163-172). Chicago, IL: IEEE. (Outstanding Paper Award Nominee)

Bietz, M. J., & Lee, C. P. (2009). Collaboration in metagenomics: Sequence databases and the organization of scientific work. In E. Balka, L. Ciolfi, C. Simone, H. Tellioğlu & I. Wagner (Eds.), *ECSCW 2009: Proceedings of the 11th European Conference on Computer Supported Cooperative Work*, 7-11 September 2009, Vienna, Austria (pp. 243-262). London: Springer-Verlag. (Acceptance rate: < 25%)

Bietz, M. J. (2008). Effects of communication media on the interpretation of critical feedback. *Proceedings of the ACM 2008 Conference on Computer Supported Cooperative Work* (pp. 467-476). New York, ACM Press. (Acceptance rate: 23%)

Birnholtz, J., & Bietz, M. J. (2003). Data at work: Supporting sharing in science and engineering. *Proceedings of the 2003 International ACM SIGGROUP Conference on Supporting Group Work* (pp. 339-348). New York, NY: ACM Press. (Acceptance rate: 35%)

Olson, G. M., Bietz, M. J., Naidoo, M., Cogburn, D. L., & Teasley, S. (2002). Collaboratories to support distributed science: The example of international HIV/AIDS research, *Proceedings of the 2002*

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<sup>1</sup> CSCW 2012 used a new reviewing model that included a full revise-and-resubmit process.

*Annual Research Conference of the South African Institute of Computer Scientists and Information Technologists on Enablement Through Technology* (pp. 44-51). Pretoria, Republic of South Africa: South African Institute for Computer Scientists and Information Technologists.

Whitten, W. B. II, Benimoff, N., Schubert, R. E., Anthal, J. S., Olson, J. S. and Bietz, M. (2001). Tracking user experience: A unified metric. *Proceedings of the Conference on Human Factors in Telecommunications*. Bergen, Norway, November 5-7, 2001.

## Book Chapters

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Bietz, M. J., Naidoo, M., & Olson, G. M. (2008). The International AIDS Research Collaboratory. In G.M. Olson, A. Zimmerman, and N. Bos (Ed.). *Scientific Collaboration on the Internet* (pp. 351-364). Cambridge, MA: MIT Press.

## Conference Presentations & Workshops

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Bietz, M. J., Wiggins, A., Handel, M. & Aragon, C. (2012). *Data-Intensive Collaboration in Science and Engineering*. Workshop held at the ACM 2012 Conference on Computer Supported Cooperative Work, Seattle, WA.

Bietz, M. J. (2011). Databases and metagenomics: Enforcing genomic ways of knowing. To be presented at the Society for Social Studies of Science, Cleveland, OH.

Lee, C. P., Bietz, M. J., Derthick, K., & Paine, D. (2011). Reuse of data and technologies across cyberinfrastructure development projects. To be presented at the Society for Social Studies of Science, Cleveland, OH.

Ferro, T., Bietz, M. J. & Lee, C. P. (2011). Feminist HCI considerations for cyberinfrastructure design. Position paper for the *Feminism and Interaction Design* workshop at the ACM Conference on Human Factors in Computing Systems (CHI). Vancouver, BC, Canada, May 8, 2011.

Derthick, K., Thayer, A., Bietz, M. J., & Lee, C. P. (2011). Using online calendaring systems to support reminiscence. Position paper for the *Bridging Practices, Theories, and Technologies to Support Reminiscence* workshop at the ACM Conference on Human Factors in Computing Systems (CHI). Vancouver, BC, Canada, May 8, 2011.

Derthick, K., Thayer, A., Bietz, M. J., & Lee, C. P. (2011). Online calendars: Affording shared pause and reflection in the midst of promoting busyness. Position paper for the *Rethinking the Culture of Busyness and IT* symposium. Seattle, WA, May 5-7, 2011.

Bietz, M. J. & Lee, C. P. (2011). Standards and communities: A sociotechnical perspective. Poster presented at the 11<sup>th</sup> Workshop of the Genomic Standards Consortium (GSC). Hinxton, UK, April 3-6, 2011.

Lee, C. P., Bietz, M. J. & Thayer, A. (2010). Stakeholders in cyberinfrastructure development. Position paper for *The Changing Dynamics of Scientific Collaborations* workshop at the ACM Conference on Computer Supported Cooperative Work (CSCW). Savannah, GA, Feb. 7, 2010.

- Thayer, A., Bietz, M. J. & Lee, C. P. (2010). Managing intimacy using online calendar systems. Poster presented at the ACM Conference on Computer Supported Cooperative Work (CSCW). Savannah, GA, Feb. 8, 2010.
- Bietz, Matthew J. (2009) The social life of data: Data management challenges and opportunities. Presented at the AGU Fall Meeting, San Francisco, CA, Dec. 14, 2009.
- Bietz, M. J. & Lee, C. P. (2009). Cyberinfrastructure and scientific validity in metagenomics research. Presented at the Society for Social Studies of Science (4S) Annual Meeting, Washington, D.C., Oct. 28 – Nov. 1, 2009.
- Bietz, M. J. & Lee, C. P. (2009). Designing cyberinfrastructure for future users. Position paper for *Collaborative Infrastructuring – Conceptualizing Emergence and Design of Information Infrastructures* workshop at the European Conference on Computer-Supported Cooperative Work (ECSCW), Vienna, Sep. 7, 2009.
- Lee, C. P. & Bietz, M. J. (2009). Barriers to the adoption of new collaboration technologies for scientists. Position paper for *The Changing Face of Digital Science: New Practices in Scientific Collaborations* workshop at the ACM Conference on Computer-Human Interaction (CHI), Boston, MA, Apr. 5, 2009.
- Lee, C. P., Bietz, M. J., and Ribes, D. (2008). *Designing cyberinfrastructure to support science*. Workshop at ACM Conference on Computer Supported Cooperative Work (CSCW), San Diego, CA, Nov. 8, 2008.
- Bietz, M. J. (2006). Feedback communication in mixed-media environments: An experimental study. Poster presented at the ACM Conference on Computer Supported Cooperative Work, Banff, Canada.
- Bietz, M. J. (2004). Feedback acceptance in distributed work. Poster presented at the ACM Conference on Computer Supported Cooperative Work, Chicago, Illinois.
- Bietz, M. J., & Birnholtz, J. (2004). How data contribute to scientific practice. Paper presented at the Academy of Management 2004 Annual Meeting, New Orleans, Louisiana.
- Olson, G. M., Bietz, M. J., Naidoo, M., Cogburn, D. L., & Teasley, S. (2003). Collaboratories for HIV/AIDS research in southern Africa. Paper presented at the HELINA 2003: Communication and Information Technology in the Global Fight Against HIV/AIDS, Johannesburg, South Africa.
- Bietz, M. J. (2003). Distributed medicine and interpersonal interaction: Implications for technology design. Paper presented at the HELINA 2003: Communication and Information Technology in the Global Fight Against HIV/AIDS, Johannesburg, South Africa.
- Bietz, M. J. (2003). Delay and Trust in Distributed Collaboration. Presented as part of panel “New millennium, new workplace: Implications of changing workplace relationships” at Academy of Management 2003 in Seattle, WA.
- Bietz, M. J., & Olson, G. M. (2002). International AIDS research collaboratory: Boundary practices for distributed science. Poster presented at the ACM Conference on Computer Supported Cooperative Work 2002, New Orleans, LA.

Bietz, M. J. (2000). Systems Design for the Gendered Workplace: Feminist Practice and Information Technology. Paper presented at the University of Michigan Interdisciplinary Program in Feminist Practice Graduate Student Conference, Practicing in 3-D: Juggling Multiple Identities, Ann Arbor, MI, March 2000.

## Grants

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Member of grant-writing team. *Leveraging Development Expertise Across Cyberinfrastructures*. (OCI-0838601). National Science Foundation Virtual Organizations as Sociotechnical Systems Program.

PI. *Virtual Standards Development Organizations: Enhancing Interoperability in Data-Intensive Science*. (Under review). National Science Foundation Virtual Organizations as Sociotechnical Systems Program.

## Research & Professional Experience

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- 2008-2010     *Research Scientist (Post-doctoral)*, Computer Supported Collaboration Lab, Department of Human Centered Design & Engineering, University of Washington, Charlotte Lee, supervisor.
- 2008-2010     *Post-Doctoral Researcher*, Department of Informatics and Institute for Software Research, Donald Bren School of Information and Computer Sciences, University of California, Irvine. Charlotte Lee & David Redmiles, supervisors.
- 2000-2007     *Graduate Student Research Assistant*, School of Information, University of Michigan, Ann Arbor, MI.  
Science of Collaboratories Project; Waterford Project; International AIDS Research Collaboratory.
- 1999           *Intern*, Back Office Usability Group, Microsoft Corporation, Redmond, WA.
- 1999- 2000     *Project Team Member: Cultural Heritage Initiative for Community Outreach (CHICO)*, School of Information, University of Michigan, Ann Arbor, MI.
- 1998 – 2000     *Intern*, Institute for Research on Women and Gender, University of Michigan, Ann Arbor, MI.
- 1997-1998     *Instructional Support Associate*, Music Library, State University of New York at Stony Brook, Stony Brook, NY.
- 1997           *Research Assistant*, Music Department, State University of New York at Stony Brook, Stony Brook, NY. Joseph Auner, supervisor.
- 1994-1995     *Research Assistant*, Lawrence University, Appleton, WI. Dominique René de Lerma, supervisor.

## Research and Teaching Areas

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*Socio-Technical Information and Communication Systems*: Computer-Mediated Communication, Distributed Knowledge Work, Relational Practice

*Cyberinfrastructure, Collaboratories, and e-Science*: Distributed Research Groups, International Scientific Collaboration, e-Science and Development, Databases and Data Sharing

*User-Centered Design of Information and Communication Technology*: Usability Methods, Participatory Design, User Needs Analysis, Computer Supported Cooperative Work

## Awards, Fellowships & Honors

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| 2010      | Consortium for the Science of Socio-Technical Systems (CSST) Summer Institute  |
| 2006      | i-Conference Doctoral Colloquium   |
| 2006      | Rackham Discretionary Grant, Horace H. Rackham School of Graduate Studies, University of Michigan  |
| 2005-2006 | Rackham Predoctoral Fellowship, Horace H. Rackham School of Graduate Studies, University of Michigan   |
| 2004      | ACM Conference on Computer-Supported Cooperative Work (CSCW) Doctoral Colloquium   |
| 2004      | Academy of Management Organizational Computing and Information Systems Doctoral Consortium   |
| 2001      | University of Michigan Interdisciplinary Committee on Organizational Studies Doctoral Student/Faculty Small Grant to study international HIV/AIDS research collaborations in southern Africa (with Prof. Gary Olson) |
| 1991-1995 | Henry Merritt Wriston Fellowship, Lawrence University  |

## Teaching Experience

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| 2001-2002 | <i>Graduate Student Instructor</i> , School of Information, University of Michigan, Ann Arbor, MI. <i>Design of User Interfaces and Evaluation of Systems and Services</i> . |
| 1997      | <i>Lecturer</i> , Music Department, State University of New York at Stony Brook, Stony Brook, NY. <i>Introduction to Music</i> .   |
| 1995-1997 | <i>Teaching Assistant</i> , Music Department, State University of New York at Stony Brook, Stony Brook, NY. <i>Remedial Sight-Singing and Introduction to Music</i> .        |

## Service Activities

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### Conference Organization

- ♦ Videos Co-Chair, CSCW 2012
- ♦ Program Committee, GROUP 2010
- ♦ Local Arrangements Chair, CSCW 2008
- ♦ Electronic Publications Chair, CSCW 2004 and CSCW 2006
- ♦ Program Committee, University of California Institute for Software Research Graduate Student Research Symposium 2006
- ♦ Webmaster, Human Computer Interaction Consortium, 2001 - 2006
- ♦ Organizing Committee, Alliance for Community Technology workshop on Making Advanced Technology Work for Community Serving Organizations, Ann Arbor, MI, May 2000
- ♦ Organizing Committee, Relational Practice in Organizations workshop, Ann Arbor, MI, October 1999

### Reviewing

- ♦ *Journal of Computer-Mediated Communication (JCMC)*
- ♦ *Human-Computer Interaction*
- ♦ *Computer Supported Cooperative Work*
- ♦ *Science, Technology and Human Values (ST&HV)*
- ♦ *Communications of the ACM (CACM)*
- ♦ ACM Conference on Computer Supported Cooperative Work (CSCW)
- ♦ ACM Conference on Human Factors in Computing Systems (CHI)

National Science Foundation Grant Review Panel, spring 2011

Mentor, Society for Social Studies of Science Mentorship Program, 2011

Faculty representative, UC Irvine assessment team for the Association of Research Libraries/Digital Library Federation E-Science Institute, 2011-12

Web developer, Artifacts & Disclosures: Michigan's LGBT Heritage online exhibit, 2000

Board member, Lavender Information and Library Association, School of Information, University of Michigan, 1999-2001

## Professional Memberships

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Association for Computing Machinery (ACM)

Society for Social Studies of Science (4S)