

## BILL TOMLINSON

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### ACADEMIC APPOINTMENTS

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<i>University of California, Irvine, USA</i>	2003-present
Professor, Informatics Department	2013-present
Professor, School of Education (courtesy appointment)	2014-present
Vice Chair, Informatics Department	2018-present
Vice Chair for Graduate Affairs, Informatics Department	2012-2014, F2015
Associate Professor (with tenure), Informatics Department	2009-2013
Assistant Professor, Informatics Department	2003-2009
<i>Victoria University of Wellington, New Zealand</i>	2017-present
Adjunct Professor, School of Information Management	2018-present
Professor, School of Information Management	2017-2018
<i>University of Central Florida, USA</i>	2003
Visiting Assistant Professor of Digital Media	
Visiting Research Associate, Institute for Simulation and Training	
<i>Massachusetts Institute of Technology, USA</i>	1997-2002
Research Assistant, Synthetic Characters Group	1997-2002
Creative Consultant, Robotic Life Group	2002

### EDUCATION

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Ph.D. in Media Arts and Sciences, School of Architecture & Planning, <i>Massachusetts Institute of Technology</i>	2002
Dissertation: Synthetic Social Relationships for Computational Entities	
S.M. in Media Arts and Sciences, School of Architecture & Planning, <i>Massachusetts Institute of Technology</i>	1999
Thesis: Interactivity and Emotion through Cinematography	
M.F.A. in Experimental Animation, <i>California Institute of the Arts</i>	1996
Thesis Film: Shaft of Light	
A.B. <i>cum laude</i> in General Studies, Biology Concentration, <i>Harvard College</i>	1994

### EXTRAMURAL HONORS & AWARDS (ALL AWARDS IN US DOLLARS)

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NSF RITEL Award - \$900,000, "AI-Enhanced Personalization for Large-Scale University Education in Sustainability Science." PI, with Co-PIs Rebecca Black, Julie Ferguson, and Andre van der Hoek.	2024-2027
HeyGen gift of AI services.	2024
Accenture LLP gift, \$67,394, "Probabilistic Knowledge Graph and Automated Ontology Generation." PI, with Hayden Freedman.	2023-2024
Accenture LLP gift, \$62,000, "Probabilistic Knowledge Graph," PI, with Hayden Freedman.	2022-2023
NSF IUSE Award - \$300,000, "Improving General Education Sustainability Science: A Pilot Study in Engaging Students with Complex Topics through Knowledge Graphs". PI, with Co-PI Andre van der Hoek.	2021-2024
US Department of Education - \$11.1M, "The Pathway to Academic Success"	2014-2018

Senior personnel, with PI Carol Booth Olson, Co-PIs Rebecca Black and Robin Scarcella.	
NSF CyberSEES Award - \$398,838, “Fostering Non-Expert Creation of Sustainable Polycultures through Crowdsourced Data Synthesis”. PI, with Co-PIs Don Patterson and Sarah Lovell.	2015-2018
iConference, Most Interesting Preliminary Results Paper Nominee, for “Self-Obviating Systems and their Application to Sustainability” (first author: B. Tomlinson).	2015
ICT4S Best Paper Nominee, for “ICT4S 2029: What will be the Systems Supporting Sustainability in 15 Years?” (first author: B. Penzenstadler).	2014
Intel Galileo Donation Program - equipment grant (value ~\$1,000), for ubiquitous computing course, PI.	2014
NSF CAREER Award - \$500,000, “An Agent-Based Approach to Human-Computer Interaction for Systems of Collocated Devices”, PI.	2007-2012
Alfred P. Sloan Research Fellowship, Computer Science - \$50,000.	2008-2012
Amazon Web Services gift, eight awards totaling \$18,000 to support various research projects	2009-2012
Constellation Energy E2 Energy to Educate award, \$50,000 for “Causality Project.” PI, with Co-PI Rebecca Black.	2011-2012
ACM CHI 2012 Best Paper Honorable Mention and CCC Sustainability Award, for “Collapse Informatics: Augmenting the Sustainability & ICT4D Discourse in HCI.” (first author: B. Tomlinson).	2012
ACM CHI 2011 Best Paper Honorable Mention, for “Comparing Activity Theory with Distributed Cognition for Video Analysis: Beyond ‘Kicking the Tires.’” (first author: Eric Baumer)	2011
NSF EAGER Award - \$280,371, “Narrative-Centered Computing for Childhood Environmental Awareness.” PI.	2009-2011
NSF CreativeIT Award - \$200,000, “Computational Metaphor Identification for Supporting Creativity in Science Education”, PI, with Co-PI Lindsey Richland.	2008-2011
NSF BPC Award - \$599,723, “American Indian Summer Institute in Computer Science: Linking Native Culture to Computer Game Culture.” Co-PI, with Dan Frost (PI) and Amelia Regan (Co-PI).	2008-2011
Google Earth Pro gift, \$8,000 in software, PI.	2009-2010
Google RISE Award, \$5,000, “AISICS.” Co-PI, with Dan Frost (PI) and Amelia Regan (Co-PI).	2009-2010
NSF REU Award - \$15,995, “Green IT and Multi-Device Systems”, supplement to CAREER Award, PI.	2008
Finalist, 2007 Toshiba Green Innovation Award. One of six finalists in Orange County, CA.	2007
Nominee, 2007 Rockefeller Foundation New Media Fellowship. One of sixty national nominees.	2007
Microsoft Research, equipment grant (value ~\$1,000), for “GreenScanner.”	2006
Nominee, 2006 Rockefeller Foundation New Media Fellowship. One of sixty national nominees.	2006
Finalist, Microsoft New Faculty Fellowship. One of eleven national finalists.	2005

## INTRAMURAL HONORS & AWARDS

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UCI Beall Applied Innovation, \$100,000, “AI that’s a Better Friend”. PI, with Rebecca Black, Andrew Torrance, Don Patterson, and Anne Marie Piper.	2025
UCI Generative AI to Improve Student Success Grant, \$10,000, “Engaging Students with Complex Topics through Generative AI”, PI, with Andre van der Hoek, Julie Ferguson, and Rebecca Black.	2023-2024
UC Online Award, \$40,000, “ICS5: Global Disruption and Information Technology”, PI.	2023-2024
UCI ICS Exploration grant, \$75,000, for “Institute for Computationally-Enabled Translational Sustainability” PI, with Andre van der Hoek, Kurt Squire, Constance Steinkuehler, Gary Olson, Judy Olson, and Dan Stokols.	2020-2022
UCI CORCL Award, “Distributed Infrastructure Work”, PI.	2019-2020

UCI ICS Research Award, “A Participatory Simulation of the US Accountable Capitalism Act”, PI. With Kurt Squire, Six Silberman, and Andrew Torrance	2019-2020
PI, VUW Faculty Research Fund grant, for “Toward a Decentralized Borderless Voluntary Nation for Sustainability” (with Markus Luczak-Roesch, Jocelyn Cranefield, Allan Sylvester, and David Johnstone)	2017-2018
UCI Provost’s Leadership Academy Member of inaugural class of 24 faculty selected by UCI for promise as future leaders.	2016-2017
UC Office of the President Innovative Learning Technologies Initiative - \$110,000, “ICS 5: Global Disruption and Information Technology” (online course), Role: PI (with Don Patterson and Bonnie Nardi, also PIs).	2014-2016
UC Office of the President Carbon Neutrality Initiative, \$111,687, “System Wide Climate Education Gateway”, Role: PI (with Debra Richardson, also PI).	2015-2016
UCI Instructional Technology Innovation Award, with Don Patterson and Bonnie Nardi.	2015
PI, UCI School-based CORCL grant, for “Examining Patent Troll Behavior Through Participatory Simulations”	2014
PI, UCI Council on Research, Computing and Libraries (CORCL) grant for “Permaculture Education for Conceptual Change about Global Climatic Disruption” (with Rebecca Black and Don Patterson)	2013-2014
PI, UCI School-based CORCL grant, for “Participatory Simulations of Corporate Governance”	2013
Celebration of Teaching School Honoree Award for Excellence in Undergraduate Teaching, UCI	2012
UCI Engaged Scholar Award	2010-2011
PI, UCI Council on Research, Computing and Library Resources, for “Computational Footprint Calculation”	2010
PI, UCI Environment Institute grant (with Brett Sanders and L. Robin Keller)	2009-10
Faculty Mentor of the Month, UCI UROP Office	2009
Co-PI, UCI Council on Research, Computing and Libraries (CORCL) grant for New Media Technologies and Civic Engagement (with Rebecca Black)	2008-09
UCI Faculty Career Development Award	2008-09
UCI Living Our Values Award Nominee	2008
UCI ICS Dean’s Award for Undergraduate Teaching	2007
PI, UCI Council on Research, Computing and Library Resources, travel funds	2007
UCI Chancellor’s Award for Excellence in Fostering Undergraduate Research	2006
PI, Calit2 Event Sponsorship Grant for Interdisciplinary Computer Gaming Research workshop, with Tom Boellstorff, Peter Krapp, Falko Kuester, Bonnie Nardi, Robert Nideffer, Patricia Seed, and Mark Warschauer.	2006
PI, UCI Council on Research, Computing and Library Resources (CORCLR) grant for Interdisciplinary Computer Gaming Research workshop.	2006
UCI Faculty Career Development Award	2005-2006
UCI Planning Grant for First-year course – “Computer Games as Art, Culture and Technology”	2005-2006
UCI Claire Trevor School of the Arts Dean’s Faculty Award for Excellence in Service	2005
Winner, Nicholas Foundation Prize for Cross-Disciplinary Research \$80,000 award for “EcoRaft Project” (with F. Lynn Carpenter).	2005
UCI Honors Program, Selected by three UCI Honors undergraduate students as the “one faculty member who has made the greatest impact on his/her education at UCI.”	2005

PI, UCI ICS Fund for Excellence Collaborative Research Initiation Award, for “EcoRaft game”	2005
PI, UCI Council on Research, Computing and Library Resources, for “Virtual Raft Project”	2005
Faculty Desktop Computing Initiative, UCI Donald Bren School of Information & Computer Sciences	2005
Ted & Janice Smith Student/Faculty Recruitment grant	2004
PI, UCI Council on Research, Computing and Library Resources For “Autonomous Acting Partners Project”	2004
PI (with Bonnie Nardi), UCI School of Information and Computer Science Smith Family Seed Funding grant, for “Making Friends Project”	2004
PI, UCI Council on Research, Computing and Library Resources, “Handheld Prisoner’s Dilemma Project”	2004
UCI School of Information & Computer Science travel grant to attend CRA Academic Careers Workshop	2003
MIT Media Lab Research Assistantship, Synthetic Characters Group	1997-2002

## PUBLICATIONS

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### *Books*

- B1. B. Tomlinson. 2010. *Greening through IT*. Cambridge, MA: MIT Press. 216pp.

### *Peer-Reviewed Journal Articles*

- J28. S. Ren, B. Tomlinson, R. W. Black, A. W. Torrance. 2024. “Reconciling the Contrasting Narratives on the Environmental Impact of Large Language Models.” *Scientific Reports*. (IF: 3.8, Top quartile interdisciplinary.)
- J27. D. J. Patterson and B. Tomlinson. 2024. “Xylem: An Energy-Efficient, Globally-Redistributive, Financial Infrastructure using Proof-by-Location.” *ACM Distributed Ledger Technologies: Research and Practice*. 2024. <https://doi.org/10.1145/3653680>
- J26. B. Tomlinson, R. W. Black, D. J. Patterson, A. W. Torrance 2024. “The Carbon Emissions of Writing and Illustrating Are Lower for AI than for Humans.” *Scientific Reports*. (IF: 4.6, Top quartile interdisciplinary.)
- J25. B. Tomlinson, A. W. Torrance, and W. J. Ripple. 2024. “Scientists’ Warning on Technology.” *Journal of Cleaner Production*. (IF: 11.1, top 5% journal in Environmental Science.)
- J24. H. Freedman, J. Metzger, N. Abolhassani, A. Tudor, S. Paul, and B. Tomlinson. 2024. “A Bayesian Approach to Constructing Probabilistic Models from Knowledge Graphs.” *International Journal of Semantic Computing*. (Second quartile journal in Linguistics and Language.)
- J23. B. Tomlinson, D. Stokols, A. Raturi, and A. W. Torrance. 2022. “Returning ecological wealth to nonhuman species through design: the case for ecosystems.” *Ecology & Society*. (IF: 4.403, top 15% ecology journal.)
- J22. B. Tomlinson, J. Boberg, J. CraneField, D. Johnstone, M. Luczak-Roesch, D. Patterson, S. Kapoor. 2020. “Analyzing the Sustainability of 28 ‘Blockchain for Good’ Projects via Affordances and Constraints” *Information Technology for Development*. (IF: 4.250, top 10% development journal.)
- J21. B. Tomlinson, M. S. Silberman, A. W. Torrance, N. Nikols, R. W. Black, K. Squire, P. S. Atwal, A. N. Mandalik, S. Railkar, and M. K. Workman. 2020. “‘Environment-selected directors’: An interactive simulation experiment of environmental representation on corporate boards.” *Ecological Economics*. Vol. 178.
- J20. B. Nardi, B. Tomlinson, D. Patterson, J. Chen, D. Pargman, B. Raghavan and B. Penzenstadler. 2018. “Computing within Limits.” *Communications of the ACM*, October 2018, Vol. 61 No. 10, Pages 86-93.
- J19. M. S. Silberman, B. Tomlinson, R. LaPlante, J. Ross, L. Irani, and A. Zaldivar. 2018. “Responsible research with crowds: pay crowdworkers at least minimum wage.” *Communications of the ACM*. March 2018, Vol. 61 No. 3, Pages 39-41. 10.1145/3180492
- J18. R. W. Black, B. Tomlinson, and K. Korobkova. 2016. “Play and identity in gendered LEGO franchises.” In: *International Journal of Play*. Vol. 5. No. 1. Pages 64-76.

- J17. B. Penzenstadler, A. Raturi, D.J. Richardson, M. S. Silberman, B. Tomlinson. 2015. "Collapse (& Other Futures) Software Engineering." *First Monday*, Vol. 20(8). Online. 2,457 words.
- J16. B. Tomlinson. 2015. "Toward a Computational Immigration Assistant." Workshop on Computing Within Limits 2015, Irvine, CA, Published in *First Monday*, Vol. 20(8). Online. 2,641 words.
- J15. B. Penzenstadler, A. Raturi, D. Richardson, B. Tomlinson. 2014. "Safety, Security, now Sustainability: the Non-Functional Requirement for the 21<sup>st</sup> Century." In: *IEEE Software*. Vol. 31(3). p. 40-47.
- J14. B. Tomlinson, E. Blevis, B. Nardi, D. Patterson, M. S. Silberman, Y. Pan. 2013. "Collapse Informatics and Practice: Theory, Method, and Design." In: *ACM Transactions on Computer-Human Interaction (TOCHI)*.
- J13. B. Tomlinson, M. S. Silberman. 2012. "The Cognitive Surplus Is Made of Fossil Fuels." In: *First Monday*, Vol. 17(11). Online. 5,502 words.
- J12. J. Ross, R. Simpson, B. Tomlinson. 2011. "Media Richness, Interactivity, and Retargeting to Mobile Devices." In: *International Journal of Arts and Technology*, Special Issue on Interactive Experiences in Multimedia and Augmented Environments.
- J11. J. Ross, B. Tomlinson. 2011. "Negabehaviors and Environmental Sustainability." In: *Journal of Sustainability Education*. Vol. 2 (1).
- J10. E. P. S. Baumer, M. Sueyoshi, B. Tomlinson. 2011. "Bloggers and Readers Blogging Together: Collaborative Co-Creation of Political Blogs." In: *Computer Supported Cooperative Work*. Vol. 20(1-2) p. 1-36.
- J9. J. Ross, B. Tomlinson. 2010. "How Games Can Redirect Humanity's Cognitive Surplus for Social Good." In: *ACM Computers In Entertainment*. December Vol. 8(4). 4pp.
- J8. L. Lewis, R. Black, B. Tomlinson. 2009. "Let Everyone Play: An Educational Perspective on Why Fan Fiction Is, or Should Be, Legal." In: *International Journal of Learning and Media*. Vol. 1(1). MacArthur Foundation/MIT Press. p. 67-81.
- J7. B. Tomlinson, M. L. Yau, E. Baumer, J. Ross, A. Correa, G. Ji. 2009. "Richly Connected Systems and Multi-Device Worlds." In: *PRESENCE: Teleoperators and Virtual Environments*. Vol. 18, No. 1. p. 54-71. MIT Press.
- J6. B. Tomlinson. 2009. "A Proximate Mechanism for Communities of Agents to Commemorate Long Dead Ancestors." In: *Journal of Artificial Societies and Social Simulation*. Vol. 12, No. 1. Online. 6,494 words.
- J5. B. Tomlinson, E. Baumer, M. L. Yau, F. L. Carpenter, R. Black. 2008. "A Participatory Simulation for Informal Education in Restoration Ecology." In: *E-Learning*. Vol. 5, No. 3. Online. p. 238-255.
- J4. B. Tomlinson. 2005. "Social Characters for Computer Games." In: *International Journal of Interactive Technology and Smart Education, Special Issue on Social Learning through Gaming*. Vol. 2, No. 2. p. 101-115.
- J3. B. Tomlinson. 2005. "From Linear to Interactive Animation: How Autonomous Characters Change the Process and Product of Animating." In: *ACM Computers in Entertainment*. Vol 3. No. 1. Online. 20 pages.
- J2. B. Blumberg, M. Downie, Y. Ivanov, M. Berlin, M. P. Johnson, B. Tomlinson. 2002. "Integrated Learning for Interactive Synthetic Characters." In: *ACM Transactions on Graphics* (Proceedings of SIGGRAPH '02). Annual Conference Series, ACM. Vol. 21, No. 3, p. 417-426.
- J1. B. Tomlinson. 1999. "Dead Technology." In: *Style*. Vol. 33, No. 2, p. 316-335.

#### *Law Review Articles*

- LR22. A. W. Torrance and B. Tomlinson. To appear. "Overharvesting—The How of Biodiversity Law." *Texas A&M Journal of Property Law*. (Specialty law review at #26 ranked law school.)
- LR21. A. W. Torrance and B. Tomlinson. To appear. "Population: The Who of Biodiversity Law." *Texas A&M Journal of Property Law*. (Specialty law review at #26 ranked law school.)
- LR20. A. W. Torrance and B. Tomlinson. To appear. "Pollution—The What of Biodiversity Loss." *Texas A&M Journal of Property Law*. (Specialty law review at #26 ranked law school.)
- LR19. A. W. Torrance and B. Tomlinson. To appear. "Invasives—The How of Biodiversity Loss." *Texas A&M Journal of Property Law*. (Specialty law review at #26 ranked law school.)

- LR18. A. W. Torrance and B. Tomlinson. To appear. "Habitat Destruction—The Where of Biodiversity Law" *Akron Law Review*. (Top 20% law review.)
- LR17. A. W. Torrance and B. Tomlinson. To appear. "Organic Websites: Certification of AI-Generated or Human-Written Content on the Internet." *Chicago-Kent Journal of Intellectual Property* (Top 20% law review.)
- LR16. B. Tomlinson and A. W. Torrance. To appear. "Law for a Finite Planet." *Texas Environmental Law Journal*. (Specialty law review at #16 ranked law school.)
- LR15. A. W. Torrance and B. Tomlinson. To appear. "Decentral Intelligence Agency - The Law and Autonomous Artificial Intelligence." *Touro Law Review*. (Top 15% law review.)
- LR14. A. W. Torrance and B. Tomlinson. To appear. "HIPPO Law: Law and the Biodiversity Crisis of Habitat Loss, Invasive Species, Pollution, Population, and Overharvesting." *UC Law SF International Law Review*. (Specialty law review at #82 ranked law school.)
- LR13. B. Tomlinson, A. W. Torrance. To appear. "A Universal Declaration of AI Rights." *Florida State University Law Review*. (Top 10% law review.)
- LR12. B. Tomlinson, A. W. Torrance, R. W. Black, and D. J. Patterson. 2024. "Late-Binding Scholarship in the Age of AI: Navigating Legal and Normative Challenges of a New Form of Knowledge Production." *UMKC Law Review*. (Top 10% law review.)
- LR11. B. Tomlinson, D. J. Patterson, and A. W. Torrance. 2024. "Turning Fake Data into Fake News: The A.I. Training Set as a Trojan Horse of Misinformation." *San Diego Law Review*. (Top 20% law review.)
- LR10. A. W. Torrance and B. Tomlinson. 2024. "If we could talk to the animals, how should we discuss their legal rights?" *Fordham Law Review*. (Top 2% law review.)
- LR9. A. W. Torrance and B. Tomlinson. 2023. "Governance of the AI, by the AI, and for the AI." 93 *Miss. L. J.* 107. (Top 25% law review.)
- LR8. A. W. Torrance and B. Tomlinson. 2023. "Training Is Everything: Artificial Intelligence, Copyright, and Fair Training." 128 *Dick. L. Rev.* 233. (Flagship law review for #89 ranked law school.)
- LR7. B. Tomlinson, A. W. Torrance, and R. W. Black. 2023. "ChatGPT and Works Scholarly - Best Practices and Legal Pitfalls in Writing with AI." *SMU Law Review Forum*, Vol. 76, p. 108-130. (Law review at #45 ranked law school.)
- LR6. B. Tomlinson and A. W. Torrance. 2020. "Fault Lines: An Empirical Legal Study of California Secession." *Seattle Journal of Technology, Environmental & Innovation Law*. (Specialty law review at #111 ranked law school.)
- LR5. B. Tomlinson, M. S. Silberman, A. W. Torrance, Y. Xie, R. W. Black, K. Squire, P. S. Atwal, A. Mandalik, and S. Raikar. 2021. "Accountability with a Capital 'Ism': A Computational Simulation of the Accountable Capitalism Act vs. Delaware Corporate Law." *Ohio State Technology Law Journal*. (Specialty law review at #22 ranked law school.)
- LR4. B. Tomlinson, A. W. Torrance, R. W. Black, M. S. Silberman, Y. Xie, and P. S. Atwal. 2020. "Judging Corporate Directors by the Companies They Keep: Results from an Interactive Simulation about the Motivations of Corporate Directors." *University of Pennsylvania Journal of Law & Public Affairs*. Vol. 6. No. 1. p. 75-113. (Specialty law review at #4 ranked law school.)
- LR3. A. Torrance, B. Tomlinson. 2011. "Property Rules, Liability Rules, and Patents: One Experimental View of the Cathedral." In: *Yale Journal of Law and Technology*. Vol. 14. (Top 5% law review.)
- LR2. A. Torrance, B. Tomlinson. 2009. "Patent Expertise and the Regress of Useful Arts." In: *Southern Illinois University Law Journal*. Vol. 33. p. 239-278. (Top 20% law review.)
- LR1. A. Torrance, B. Tomlinson. 2009. "Patents and the Regress of Useful Arts." In: *Columbia Science and Technology Law Review*. Vol. 10. Online. 39pp. (Top 15% law review.) Invited reprint in *Intellectual Property and Economic Development*. 2021. C. Correa, ed., part of the Critical Concepts in Intellectual Property Law Series, R. Merges, ed., Edward Elgar.

- BC5. A. Raturi, B. Tomlinson, D. Richardson. 2015. "Green Software Engineering Environments". *Green in Software Engineering*, Springer.
- BC4. B. Tomlinson. 2014. "Technology and City Sustainability." In: H. Blanco and D. Mazmanian (eds.). *Elgar Companion to Sustainable Cities: Strategies, Methods and Outlook*, Edward Elgar Publishing Ltd.
- BC3. E. Baumer and B. Tomlinson. 2009. "Relationships Between the Processes of Emergence and Abstraction in Societies." In Trajkovski, G. and Collins, S. (eds.) *Handbook of Research on Agent-Based Societies: Social and Cultural Interactions*. Hershey, PA: IGI-Global.
- BC2. E. Baumer and B. Tomlinson. 2005. "Institutionalization Through Reciprocal Habitualization and Typification." In: Second NASA/JPL Workshop on Radical Agent Concepts (WRAC). NASA Goddard Space Flight Center, Greenbelt, MD. Published in *Innovative Concepts for Autonomic and Agent-Based Systems, Lecture Notes in Computer Science*, Vol. 3825, p. 122-134, Springer-Verlag, 2006.
- BC1. B. Tomlinson, B. Blumberg. 2003. "AlphaWolf: Social Learning, Emotion and Development in Autonomous Virtual Agents." In: First GSFC/JPL Workshop on Radical Agent Concepts (WRAC). NASA Goddard Space Flight Center, Greenbelt, MD. January 2002. Published in *Innovative Concepts in Agent-Based Systems, Lecture Notes in Computer Science*, Vol. 2564, p. 35-45, Springer-Verlag, 2003.

*Peer-Reviewed Conference and Symposium Proceedings – Full Papers*

- CF24. H. Freedman, N. Young, D. Shaefer, Q. Song, A. van der Hoek, B. Tomlinson. 2024. "Construction and Analysis of Collaborative Educational Networks based on Student Concept Maps", In Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW '24). (22% acceptance rate)
- CF23. H. Freedman, A. van der Hoek, B. Tomlinson. 2022. "Improving Wikidata with Student-Generated Concept Maps", International AAAI Conference on Web and Social Media (ICWSM 22). (22% acceptance rate)
- CF22. B. Tomlinson, M. S. Silberman, A. Torrance, K. Squire, P. S. Atwal, A. Mandalik, S. Railkar, R. W. Black. 2020. "A Participatory Simulation of the Accountable Capitalism Act." In Proceedings of the SIGCHI conference on human factors in computing systems (CHI '20). ACM.
- CF21. J. Norton, B. Penzenstadler, B. Tomlinson. 2019. "Implications of Grassroots Sustainable Agriculture Community Values on the Design of Information Systems." In Proceedings of the 22nd ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW '19), Austin, TX.
- CF20. B. Penzenstadler, B. Tomlinson, E. Baumer, M. Pufal, A. Raturi, D. Richardson, B. Cakici, R. Chitchyan, G. Da Costa, L. Dombrowski, M.P. Edwardsson, E. Eriksson, X. Franch, G.R. Hayes, C. Herzog, W. Lohmann, M. Mahaux, A. Mavin, M. Mazmanian, S. Nayeabaziz, J. Norton, D. Pargman, D. Patterson, J-M. Pierson, K. Roher, S. Silberman, K. Simonson, A.W. Torrance, A. van der Hoek. 2014. "ICT4S 2029: What will be the Systems Supporting Sustainability in 15 Years?" 2nd International Conference on ICT for Sustainability. Stockholm, Sweden, August 24-27, 2014. (Best Paper Nominee).
- CF19. B. Tomlinson, M. S. Silberman, D. Patterson, Y. Pan, and E. Blevis. 2012. "Collapse Informatics: Augmenting the Sustainability & ICT4D Discourse in HCI." in ACM Conference on Human Factors in Computing Systems (CHI 2012). (Austin, TX.) (Best Paper Honorable Mention, CCC Sustainability Award).
- CF18. E. P. S. Baumer and B. Tomlinson. 2011. "Comparing Activity Theory with Distributed Cognition for Video Analysis: Beyond 'Kicking the Tires.'" in ACM Conference on Human Factors in Computing Systems (CHI 2011). (Vancouver, BC, Canada). (Best Paper Honorable Mention).
- CF17. J. Hansen, Baumer, E.P.S., Richland, L., and Tomlinson, B. 2011. "Metaphor and Creativity in Learning Science." in American Educational Researchers Association Annual Conference (AERA). (New Orleans, Louisiana).
- CF16. J. Ross, N. Shantharam, and B. Tomlinson. 2010. "Collaborative Filtering and Carbon Footprint Calculation." in IEEE International Symposium on Sustainable Systems and Technology (ISSST 2010). (Washington, DC).
- CF15. E. P. S. Baumer, J. Sinclair, and B. Tomlinson. 2010. "America Is Like Metamucil': Critical and Creative Thinking about Metaphor in Political Blogs." in ACM Conference on Human Factors in Computing Systems (CHI 2010). (Atlanta, GA).

- CF14. E. Baumer, B. Tomlinson, J. Hansen, and L. Richland. 2009. "Fostering Metaphorical Creativity Using Computational Metaphor Identification." In: ACM Conference on Creativity & Cognition. (Berkeley, CA).
- CF13. E. Baumer, J. Sinclair, D. Hubin, and B. Tomlinson. 2009. "metaViz: Visualizing Computationally Identified Metaphors in Political Blogs." In: The IEEE Symposium on Social Computing (SocialCom). (Vancouver, BC, Canada).
- CF12. E. Baumer, B. Tomlinson, and L. Richland. 2009. "Computational Metaphor Identification: A Method for Identifying Conceptual Metaphors in Written Text." In: The Second International Analogy Conference (Analogy'09). (Sofia, Bulgaria). Published in: B. Kokinov, K. Holyoak, D. Gentner. (Eds.) New Frontiers in Analogy Research. Sofia, Bulgaria: New Bulgarian University Press.
- CF11. E. Baumer, L. Richland, and B. Tomlinson. 2009. "Applying Computational Metaphor Identification to Middle School Students' Writing about Cellular Reproduction." National Association for Research in Science Teaching Annual Conference (NARST). (Garden Grove, CA).
- CF10. E. Baumer, M. Sueyoshi, and B. Tomlinson. 2008. "Exploring the Role of the Reader in the Activity of Blogging." In: ACM Conference on Human Factors in Computing Systems (CHI 2008). Florence, Italy. p. 1111-1120.
- CF9. B. Tomlinson. 2008. "Prototyping a Community-Generated, Mobile Device-Enabled Database of Environmental Impact Reviews of Consumer Products." In: Hawai'i International Conference on System Sciences (HICSS), Social Spaces Minitrack. Big Island, HI. 10 pages.
- CF8. E. Baumer, B. Tomlinson. 2006. "The Interconnected Roles of Abstraction and Emergence in Artificial Societies." In: AAAI Fall Symposium. Interaction and Emergent Phenomena in Societies of Agents. Arlington, VA. 9 pages.
- CF7. T. Alspaugh, B. Tomlinson, E. Baumer. 2006. "Using Social Agents to Visualize Software Scenarios." ACM Symposium on Software Visualization (SOFTVIS'06). p. 87-94.
- CF6. B. Tomlinson, M. L. Yau, E. Baumer. 2006. "Embodied Mobile Agents." In: Fifth International Joint Conference on Autonomous Agents & Multi Agent Systems (AAMAS), Hakodate, Japan. p. 969-976.
- CF5. B. Tomlinson. 2005. "Negative Behavior Space in the Design of Interactive Agents." In: Artificial Intelligence and Interactive Digital Entertainment (AIIDE 05) Conference. Marina del Rey, CA. AAAI Press. 6 pages.
- CF4. B. Tomlinson, M. Downie, M. Berlin, J. Gray, D. Lyons, J. Cochran, B. Blumberg. 2002. "Leashing the AlphaWolves: Mixing User Direction with Autonomous Emotion in a Pack of Semi-Autonomous Virtual Characters." In: Proceedings of the 2002 ACM SIGGRAPH Symposium on Computer Animation. San Antonio, TX. p. 7-14.
- CF3. B. Tomlinson, B. Blumberg. 2001. "Social Behavior, Emotion and Learning in a Pack of Virtual Wolves." In: 2001 AAAI Fall Symposium "Emotional and Intelligent II: The Tangled Knot of Social Cognition." North Falmouth, MA. 6 pages.
- CF2. B. Tomlinson, B. Blumberg, B. Rhodes. 2000. "How Is an Agent Like a Wolf?: Dominance and Submission in Multi-Agent Systems." In: International ICSC Symposium on Multi-Agents and Mobile Agents in Virtual Organizations & E-Commerce (MAMA 2000). Wollongong, Australia. 6 pages.
- CF1. B. Tomlinson, B. Blumberg, D. Nain. 2000. "Expressive Autonomous Cinematography for Interactive Virtual Environments." In: Proceedings of the Fourth International Conference on Autonomous Agents (Agents 2000). Barcelona, Catalonia, Spain. p. 317-324.

*Invited Full Conference Papers*

- CIF2. B. Tomlinson, B. Nardi, D. Patterson, A. Raturi, D. Richardson, J-D. Saphores, D. Stokols. 2015. "Toward Alternative Decentralized Infrastructures." Proceedings of the 6th Annual Symposium on Computing for Development (ACM DEV). London, UK. 8 pages.
- CIF1. B. Blumberg, B. Tomlinson, M. Downie. 2001. "Multiple Conceptions of Character-Based Interactive Installations." In: Proceedings of Computer Graphics International. Hong Kong. p. 5-11.

*Peer-Reviewed Conference Proceedings – Short Papers and Extended Abstracts*



- CS23. R. Rachum, Y. Nakar, B. Tomlinson, N. Alon, and R. Mirsky. 2024. “Emergent Dominance Hierarchies in Reinforcement Learning Agents”, International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2024).
- CS22. H. Freedman, A. van der Hoek, B. Tomlinson. 2021. “Student-Generated Knowledge Graphs about Sustainability”, International Symposium for Sustainable Systems and Technology 2021.
- CS21. B. Tomlinson, B. Nardi, D. Stokols, A. Raturi. 2021. “Ecosystems: Representing Ecosystem Impacts in Design.” ACM Conference on Human Factors in Computing Systems (CHI 2021) Extended Abstracts (alt.chi). 15 pages.
- CS20. B. Tomlinson. 2020. “Suffering-Centered Design.” ACM Conference on Human Factors in Computing Systems (CHI 2020) Extended Abstracts (alt.chi). 18 pages.
- CS19. B. Raghavan, B. Nardi, S. Lovell, J. Norton, B. Tomlinson, D. Patterson. 2016. “Computational Agroecology: Sustainable Food Ecosystem Design.” ACM Conference on Human Factors in Computing Systems (CHI 2016) Extended Abstracts (alt.chi). 13 pages.
- CS18. B. Tomlinson, J. Norton, E. P. S. Baumer, M. Pufal, B. Raghavan. 2015. “Self-Obviating Systems and their Application to Sustainability.” iConference. Newport Beach, CA. (Most Interesting Preliminary Results Paper nominee.) 10 pages.
- CS17. R. Black, B. Tomlinson, K. Korobkova, S. Ivy. 2014. “Learning, Play, and Identity in Gendered Lego Franchises.” Games + Learning + Society Conference, Madison, WI. 1 page.
- CS16. E.P.S. Baumer, J. Ahn, M. Bie, E. Bonsignore, A. Börütecene, O. Buruk, T. Clegg, A. Druin, F. Echter, D. Gruen, M. Guha, C. Hordatt, A. Krüger, S. Maidenbaum, M. Malu, B. McNally, M. Muller, L. Norooz, J. Norton, O. Ozcan, D. J. Patterson, A. Riener, S. Ross, K. Rust, J. Schöning, M. S. Silberman, B. Tomlinson, and J. Yip. 2014. “CHI 2039: speculative research visions.” In CHI '14 Extended Abstracts on Human Factors in Computing Systems (CHI EA '14). ACM, New York, NY, USA, 761-770.
- CS15. J. Norton, S. Nayeibaziz, S. Burke, B. J. Pan, B. Tomlinson. 2014. “Plant Guild Composer: An Interactive Online System to Support Back Yard Food Production.” ACM Conference on Human Factors in Computing Systems (CHI 2014) Extended Abstracts (Interactivity). 4 pages.
- CS14. B. Tomlinson, J. Ross, P. André, E.P.S. Baumer, D.J. Patterson, J. Corneli, M. Mahaux, S. Nobarany, M. Lazzari, P. Penzenstadler, A.W. Torrance, D.J. Callele, G.M. Olson, M.S. Silberman, M. Ständer, F.R. Palamed, A. Salah, E. Morrill, X. Franch, F. Mueller, J. Kaye, R.W. Black, M.L. Cohn, P.C. Shih, J. Brewer, N. Goyal, P. Näkki, J. Huang, N. Baghaei, and C. Saper. 2012. “Massively Distributed Authorship of Academic Papers.” ACM Conference on Human Factors in Computing Systems (CHI 2012) Extended Abstracts (alt.chi). 10 pages.
- CS13. N. Amsel, Z. Ibrahim, A. Malik, B. Tomlinson. 2011. “Toward Sustainable Software Engineering.” In: 33<sup>rd</sup> International Conference on Software Engineering (ICSE 2011), New Ideas and Emerging Results track. Honolulu, HI. 4 pages.
- CS12. N. Amsel, B. Tomlinson. 2010. “Green Tracker: A Tool for Estimating the Energy Consumption of Software.” In: ACM Conference On Human Factors In Computing Systems (CHI 2010), Work in Progress. Atlanta, GA. 6 pages.
- CS11. M. S. Silberman, B. Tomlinson. 2010. “Toward an ecological sensibility: tools for evaluating sustainable HCI.” In: ACM Conference On Human Factors In Computing Systems (CHI 2010), Work in Progress. Atlanta, GA. 6 pages.
- CS10. J. Ross, L. Irani, M. S. Silberman, A. Zaldivar, B. Tomlinson. 2010. “Who are the Crowdworkers? Shifting Demographics in Mechanical Turk.” ACM Conference on Human Factors in Computing Systems (CHI 2010) Extended Abstracts (alt.chi). 10 pages.
- CS9. P. Dourish, G. Hayes, L. Irani, C. Lee, S. Lindtner, B. Nardi, D. Patterson, and B. Tomlinson. 2008. “Informatics at UC Irvine.” ACM Conference on Human Factors in Computing Systems (CHI 2008) Extended Abstracts (Research Landscapes). 6 pages.

- CS8. E. Baumer, B. Tomlinson. 2007. "Questioning the Technological Panacea: Three Reflective Questions for Designers." ACM Conference on Human Factors in Computing Systems (CHI 2007) Extended Abstracts (alt.chi). 9 pages.
- CS7. B. Tomlinson, E. Baumer, M. L. Yau, P. MacAlpine, L. Canales, A. Correa, B. Hornick, A. Sharma. 2007. "Dreaming of Adaptive Interface Agents." ACM Conference on Human Factors in Computing Systems (CHI 2007) Extended Abstracts (Trends - Interactivity). 6 pages.
- CS6. B. Tomlinson, M. L. Yau, E. Baumer, S. Goetz, L. Carpenter, R. Pratt, K. Young, C. May-Tobin. 2006. "The EcoRaft Project: A Multi-Device Interactive Graphical Exhibit for Learning About Restoration Ecology." In: ACM Conference On Human Factors In Computing Systems (CHI 2006), Work in Progress. Montreal, Canada. p. 1445-1450.
- CS5. G. Elliott, B. Tomlinson. 2006. "PersonalSoundtrack: Context-aware playlists that adapt to user pace." In: ACM Conference On Human Factors In Computing Systems (CHI 2006), Work in Progress. Montreal, Canada. p. 736-741.
- CS4. B. Tomlinson, M. L. Yau and J. Gray. 2005. "Heterogeneous Character Animation: How to make an interactive character jump between stationary and mobile graphical computers" In: SIGGRAPH 05 Sketches. Los Angeles, CA. 1 page.
- CS3. B. Tomlinson. 2005. "A Heterogeneous Animated Platform for Educational Participatory Simulations." In: 10th Computer Supported Collaborative Learning (CSCL 05) Conference. Taipei, Taiwan. p. 677-681.
- CS2. B. Tomlinson, M. L. Yau, J. O'Connell, K. Williams, S. Yamaoka. 2005. "The Virtual Raft Project: A Mobile Interface for Interacting with Communities of Autonomous Characters." In: Conference Abstracts and Applications, ACM Conference On Human Factors In Computing Systems (CHI 2005). Portland, OR. p. 1150-1151.
- CS1. B. Tomlinson, B. Blumberg. 2002. "Synthetic Social Relationships in Animated Virtual Characters." In: From Animals to Animats 7. Proceedings of the Seventh International Conference on the Simulation of Adaptive Behavior (SAB '02). Edinburgh, UK. p. 401-402.

*Peer-Reviewed Workshop Proceedings and Conference Posters*

- W35. R. Rachum, Y. Nakar, B. Tomlinson, N. Alon, and R. Mirsky. 2024. "Emergent Dominance Hierarchies in Reinforcement Learning Agents." International Workshop on Coordination, Organizations, Institutions, Norms and Ethics for Governance of Multi-Agent Systems (COINE@AAMAS2024). Also presented at: Adaptive and Learning Agents Workshop (ALA@ AAMAS2024).
- W34. D. J. Patterson and B. Tomlinson. 2022. "Proof-by-Location as a Socially Responsible Financial Infrastructure." IEEE Global Emerging Technology Blockchain Forum.
- W33. H. Freedman, D. Schaefer, A. van der Hoek, and B. Tomlinson. 2022. "Node Position in a Group-Constructed Knowledge Network as an Indicator of Contributor Accuracy." 42<sup>nd</sup> International Social Network Conference (Sunbelt '22).
- W32. H. Freedman, A. van der Hoek, and B. Tomlinson. 2022. "Connected Learning with Cognitive Maps in Sustainability Education." NSF Improving Undergraduate Stem Education (IUSE) Summit.
- W31. A. Streed, M. Kantar, B. Tomlinson, and B. Raghavan. 2021. "How Sustainable is the Smart Farm?" In LIMITS '21: Workshop on Computing within Limits, June 14–15, 2021.
- W30. H. Freedman, B. Tomlinson, A. Torrance, A. van der Hoek. 2021. "A Measure of Species' Charisma". Ecological Society of America Annual Meeting. Late Breaking Poster.
- W29. B. Tomlinson, M. S. Silberman, A. W. Torrance, K. Squire. 2019. "Participatory simulation of institutions could help address global limits." In Fifth ACM Workshop on Computing Within Limits, Lappeenranta, Finland. 2 pages.
- W28. M. S. Silberman, B. Tomlinson, A. W. Torrance 2019. "Agent-based Modeling and Participatory Simulation: Tools for Policy Analysis, Stakeholder Dialogue, and Public Communication." 6th Regulating for Decent Work Conference, 8-10 July 2019. International Labour Organization.

- W27. J. Norton, B. Penzenstadler, S. McDonald, E. Kang, N. Koirala, R. Konishi, G. Pena Carmona, J. Shah, S. Troncoso, B. Tomlinson. 2019. "The SAGE Community Coordinator: A demonstration." In Fifth ACM Workshop on Computing Within Limits, Lappeenranta, Finland.
- W26. B. Tomlinson, B. A. Aubert. 2017. "Information Systems in a Future of Decreased and Redistributed Global Growth." In Third ACM Workshop on Computing Within Limits, Santa Barbara, CA. 8 pages.
- W25. S. McDonald, B. Nardi, B. Tomlinson. 2017. "Political Realities of Digital Communication: The Limits of Value from Digital Messages to Members of the US Congress." In Third ACM Workshop on Computing Within Limits, Santa Barbara, CA. 10 pages.
- W24. S. McDonald, B. Tomlinson. 2017. "Sustainable Food Systems for Preventative and Prescriptive Medicine." In ACM CHI 2017 Conference on Human Factors in Computing Systems, Workshop on Designing Sustainable Food Systems, Denver, CO. 3 pages.
- W23. B. Tomlinson, D. Patterson, B. Nardi. 2016. "A Report from an Online Course on Global Disruption and Information Technology." Second Workshop on Computing Within Limits, Irvine, CA. 7 pages.
- W22. A. Raturi, B. Tomlinson, D.J. Richardson. 2015. "Modeling the Environmental Impact of Agricultural Systems", Workshop on ICT for Sustainability at iConference 2015, Newport Beach, CA.
- W21. A. Raturi, B. Penzenstadler, D.J. Richardson, B. Tomlinson. 2014. "Developing a Sustainability Nonfunctional Requirements Framework", 3rd International Workshop on Green and Sustainable Software (GREENS 2014) at ICSE 2014, Hyderabad, India.
- W20. J. Norton, A. Stringfellow, J. LaViola Jr., B. Penzenstadler, B. Tomlinson. 2013. "Domestic Plant Guilds: A Software System for Sustainability" In: Proceedings of the 2nd International Workshop on Requirements Engineering for Sustainability (RE4SuSy), Rio, Brasil, 15th of July 2013, CEUR-WS.org, online at CEUR-WS.org/Vol-995.
- W19. B. Penzenstadler, B. Tomlinson, D. Richardson. 2012. "RE4ES: Support Environmental Sustainability by Requirements Engineering." International Workshop on "Requirements Engineering for Sustainable Systems". 6 pages.
- W18. A. Torrance, B. Tomlinson. 2010. "Property Rules, Liability Rules, and Patents: One Experimental View of the Cathedral." Conference on Empirical Legal Studies (CELS). Poster session. 28 pages.
- W17. M. S. Silberman, J. Ross, L. Irani, B. Tomlinson. 2010. "Sellers' problems in human computation markets." Human Computation Workshop (HComp 2010). 4 pages.
- W16. E. P. S. Baumer, J. P. White, and B. Tomlinson. 2010. "Comparing Semantic Role Labeling with Typed Dependency Parsing in Computational Metaphor Identification." in Computational Approaches to Linguistic Creativity (CALC-10) Workshop at Human Language Technologies (NAACL/HLT), (Los Angeles, CA). 10 pages.
- W15. M. S. Silberman and B. Tomlinson. 2010. "Precarious infrastructure and postapocalyptic computing." In ACM CHI 2010 Conference on Human Factors in Computing Systems, Workshop on Examining Appropriation, Re-use, and Maintenance for Sustainability. Boston, MA. 3 pages.
- W14. B. Tomlinson. 2009. "Broadening Human Horizons through Green IT." In ACM CHI 2009 Conference on Human Factors in Computing Systems, Workshop on Defining the Role of HCI in the Challenges of Sustainability. Boston, MA. 3 pages.
- W13. E. Baumer, M. Sueyoshi, and B. Tomlinson. 2008. "Examining Privacy in Blogging from the Reader's Perspective." In Poster Session, Second International Conference on Weblogs and Social Media (ICWSM 2008). Seattle, WA. 2 pages.
- W12. E. Baumer and B. Tomlinson. 2008. "Computational Identification of Conceptual Metaphors in Communities of Blogs." In Poster Session, Second International Conference on Weblogs and Social Media (ICWSM 2008). Seattle, WA. 2 pages.
- W11. E. Baumer, B. Tomlinson. 2008. "Dream-like Interfaces and Computational Dreaming." In: ACM Conference On Human Factors In Computing Systems (CHI 2008), Workshop on Night and Darkness: Interaction after Dark. Florence, Italy. 2 pages.

- W10. A. Torrance, B. Tomlinson. 2007. "A Multi-User Interactive Patent Simulation System." Fifth Annual Works in Progress Intellectual Property Colloquium. Washington, DC.
- W9. M. L. Yau, J. Moore, Z. Ji, M. Roland, B. Tomlinson. 2007. "Persistence and Propagation of Shadow Direction in Mobile and Multi-Device Graphics." In: SIGGRAPH 07, Research Posters. San Diego, CA.
- W8. E. Baumer, B. Tomlinson. 2007. "Advocating Polytheoretic Evaluation of Interactive Art and New Media." In: ACM Conference On Human Factors In Computing Systems (CHI 2007), Workshop on HCI and New Media: Methodology and Evaluation. San Jose, CA. 4 pages.
- W7. T. Alspaugh, E. Baumer, B. Tomlinson. 2006. "On a Mixed-Methods Evaluation of a Social-Agent Scenario Visualization." Fourth International Workshop on Comparative Evaluation in Requirements Engineering (CERE '06), September 2006. 6 pages.
- W6. M. L. Yau, J. Z. Moore, B. Tomlinson. 2006. "Interactive Lighting Design for Multi-device Virtual Environments." In: SIGGRAPH 2006 Posters. 1 page.
- W5. B. Tomlinson, E. Baumer, M. L. Yau. 2006. "The Island Metaphor." In: SIGGRAPH 2006 Posters. 1 page.
- W4. E. Baumer, B. Tomlinson. 2005. "Synthetic Social Construction for Autonomous Characters." In: AAAI 05 Conference, Workshop on Modular Construction of Human-Like Intelligence. Pittsburgh, PA. 7 pages.
- W3. B. Tomlinson, J. Gray, M. L. Yau. 2005. "Multiple Virtual Rafts: A Multi-User Paradigm for Interacting with Communities of Autonomous Characters." In: ACM Conference On Human Factors In Computing Systems (CHI 2005), Late Breaking Results (Interactive Poster). Portland, OR. p. 1833-1836.
- W2. B. Tomlinson. 2005. "Designing Affective Interaction Paradigms for Animated Characters." In: Human Computer Interaction Consortium Winter Meeting (HCIC 05). Fraser, CO. 10 pages.
- W1. B. Tomlinson. 2004. "Using Human Acting Skill to Measure Empathic Value in Heterogeneous Characters." In: Third International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), Workshop on Empathic Agents. New York, NY. 6 pages.

*Peer-Reviewed Workshop Proposals*

- WO4. A. Raturi, J. Norton, B. Tomlinson, E. Blevis, L. Dombrowski. 2017. "Designing Sustainable Food Systems." In ACM CHI 2017 Conference on Human Factors in Computing Systems, Extended Abstracts, Denver, CO. 8 pages.
- WO3. B. Penzenstadler, Richardson, D., Tomlinson, B., Fleischmann, K., Becker, C., Nathan, L., Blevis, E., Silberman, S., Karlin, B., Norton, J., Raturi, A. 2015. "ICT for Sustainability – Current and future research directions." In iConference 2015 Proceedings.
- WO2. J. Huh, Nathan, L., Silberman, S., Blevis, E., Tomlinson, B., Sengers, P., and Busse, D., 2010. "Examining Appropriation, Re-use, and Maintenance for Sustainability." In Extended Abstracts of the Twenty-Eighth Annual SIGCHI Conference on Human Factors in Computing Systems (Atlanta, GA, USA, April 10-15, 2010). CHI '10. ACM: New York, NY.
- WO1. E. Huang, Blevis, E., Mankoff, J., Nathan, L., and Tomlinson, B. 2009. "Defining the Role of HCI in the Challenges of Sustainability." In Extended Abstracts of the Twenty-Seventh Annual SIGCHI Conference on Human Factors in Computing Systems (Boston, MA, USA, April 04-09, 2009). CHI '09. ACM, New York, NY.

*Invited Workshop Proceedings*

- CI1. B. Tomlinson. 2011. "IT and (Un)sustainable Cultures." NSF/CCC Workshop on IT and the Sustainability Enterprise, Role of Information Sciences and Engineering in Sustainability (RISES).

*Professional Magazines and Newsletters*

- M10. J. Norton, A. Raturi, B. Nardi, S. Prost, S. McDonald, D. Pargman, O. Bates, M. Normark, B. Tomlinson, N. Herbig. 2017. "A grand challenge for HCI: food + sustainability." In: ACM Interactions. Vol 24, No. 6.
- M9. B. Tomlinson, D. J. Patterson, B. Nardi. 2016. "Teaching Global Disruption and Information Technology Online." In: ACM Interactions. Vol 23, No. 6.

- M8. B. Nardi, B. Tomlinson, D. J. Patterson. 2016. “Special Issue on Sustainable HCI Education.” In: *ACM Interactions*. Vol 23, No. 6.
- M7. B. Tomlinson, D. J. Patterson, Y. Pan, E. Blevis, B. Nardi, S. Silberman, J. Norton, J. J. LaViola Jr. 2012. “What If Sustainability Doesn’t Work Out? An Informatics Perspective on Adaptation to Global Change.” In: *ACM Interactions*. Vol. 19, No. 6, p. 50-55.
- M6. B. Tomlinson, M. S. Silberman, J. White. 2011. “Can More Efficient IT Be Worse for the Environment?” In: *IEEE Computer*, Green IT column. Vol. 44, No. 1. January 2011.
- M5. B. Tomlinson. 2010. “Future Workplaces to Support Environmental Sustainability.” In: *ACM Interactions*. Vol. 17, No. 6. Nov/Dec 2010.
- M4. B. Tomlinson. 2008. “A Call for Pro-Environmental Conspicuous Consumption in the Online World.” In: *ACM Interactions*. Vol. 15, No. 6. Nov/Dec 2008. Sustainably Ours forum, edited by E. Blevis.
- M3. R. T. Pratt, F. L. Carpenter and B. Tomlinson. 2006. “The EcoRaft Project: An Interdisciplinary Approach to Teaching Lessons in Ecological Restoration.” In: *Bulletin of the Ecological Society of America*. Vol. 87, No. 2. April 2006, p. 176-182.
- M2. B. Tomlinson, B. Blumberg. 2002. “Social Synthetic Characters.” In: *ACM SIGGRAPH Computer Graphics*. Vol. 36, No. 2, p. 5-7. Visfiles column, edited by Bill Hibbard.
- M1. M. Downie, B. Tomlinson, B. Blumberg. 2002. “Developing an Aesthetic: Character-Based Interactive Installations.” In: *ACM SIGGRAPH Computer Graphics*. Vol. 36, No. 2, p. 33-36.

#### *Technical Reports and arXiv papers*

- TR7. B. Tomlinson, R. W. Black. 2021. “Work Online, Welfare Calls, and Wine Night: Effects of the COVID-19 Pandemic on Individuals’ Technology Use.” arXiv preprint arXiv:2101.07388.
- TR6. J. Ross, O. Holmes, B. Tomlinson. 2012. “Playing with Genre: User-Generated Game Design in LittleBigPlanet 2.” LUCI-2012-003, Laboratory for Ubiquitous Computing and Interaction. Irvine, CA: University of California, Irvine.
- TR5. D. E. Lyons, J. J. Long, R. S. Goraya, J. Lu, & B. Tomlinson. 2012. “Cultivating Environmental Systems Thinking with Karunatree.” LUCI-2012-002, Laboratory for Ubiquitous Computing and Interaction. Irvine, CA: University of California, Irvine. Available at: [luci.ics.uci.edu/websiteContent/repository/techreports/2012/LUCI-2012-002.pdf](http://luci.ics.uci.edu/websiteContent/repository/techreports/2012/LUCI-2012-002.pdf)
- TR4. E. P. S. Baumer, D. Hubin, B. Tomlinson. 2010. “Computational Metaphor Identification.” LUCI-2010-002, Laboratory for Ubiquitous Computing and Interaction. Irvine, CA: University of California, Irvine.
- TR3. J. Ross, N. Amsel, R. Beckman, and B. Tomlinson, B. 2010. “EcoPath: Adding Spatial, Social, and Gaming Contexts to Personal Tracking Systems.” Social Code Report 2010-01.
- TR2. J. Ross, A. Zaldivar, L. Irani, and B. Tomlinson. 2009. “Who are the Turkers? Worker Demographics in Amazon Mechanical Turk.” Social Code Report 2009-01.
- TR1. C. P. Lee, B. Hornick, J. Chen, M. Blonk, B. Tomlinson, and B. Nardi. 2008. “The Technology Garden.” LUCI-2008-001, Laboratory for Ubiquitous Computing and Interaction. Irvine, CA: University of California, Irvine.

#### *Theses*

- T2. W. Tomlinson. 2002. “Synthetic Social Relationships for Computational Entities.” Doctoral Dissertation. MIT Program in Media Arts & Sciences. 202 pages.
- T1. W. Tomlinson. 1999. “Interactivity and Emotion through Cinematography.” Master’s Thesis. MIT Program in Media Arts & Sciences. 77 pages.

#### *Miscellaneous*

- M2. Wikipedia and Wikidata contributions. More than 90 contributions to Wikipedia from 2017 to the present, including creation of three new pages. More than 80 contributions to Wikidata from 2020 to the present, Wikipedia’s knowledge graph site.
- M1. B. Tomlinson. 2008. Foreword to: R. O’Neill. 2008. “Digital Character Development: Theory and Practice.” Morgan Kaufmann.

## CREATIVE WORK

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### *Awards/Recognition for Creative Work*

Nominee, 2006 Tech Museum Awards, Environmental category, for “EcoRaft Project.”	2006
Finalist, Peoria Prize for Creativity, “Virtual Raft Project.” One of three national finalists.	2005
Grand Prize, Interactive category, Digital Art Awards 2002, Keio University, for “AlphaWolf.”	2002
Honorary Mention, Interactive Art, Prix Ars Electronica 2002, for “AlphaWolf.”	2002
Choice of the Jury, Cinanima, for “Shaft of Light.”	1998
Official Selection, Sundance Film Festival, for “Shaft of Light.”	1997
2nd Place, The Jim Henson Award for Best Stop Motion Produced by an Independent, World Animation Celebration, for “Shaft of Light.”	1997
CINE Eagle, for “Shaft of Light.”	1997
Director’s Choice, Black Maria Film Festival, for “Shaft of Light.”	1997
Production Grant, The ArtFront Partnership, \$1,500 award for “Boxed In” (with L. Tomlinson).	1996

### *Web Projects*

- WP13. ZotGraph. 2021-present. Online knowledge-graph-based educational system. Collaboration with Andre van der Hoek, Hayden Freedman, Julie Ferguson, Rebecca Black, and Neil Young.
- WP12. PatentGame. 2008-20. Online legal/business simulation to test value of patent system. Collaboration with Andrew Torrance, Bryant Jones, and Nitin Shantharam. Presented by Professor Torrance at dozens of conferences, workshops, universities, and corporations around the world.
- WP11. News X-Ray. 2019. iPhone app to enable people to identify and learn about the affiliations of media pundits. Collaboration with Barath Raghavan, Derrick Serrano, Cynthia Aguilar, Alicia Nunez and Runqian (Ryan) Zhang.
- WP10. GrammarBrushstrokes.com. 2014. Technical director and lead programmer for a database-backed online system for teachers and students to help students improve their academic writing skills via writing, peer-review, revision, and teacher feedback. Targeted to reach 105,000 7-12<sup>th</sup> grade students through the i3 Pathway Project. Rebecca Black, Bill Tomlinson, and the students in UCI’s Informatics 117 course in Winter 2014 (Nealon Young, Bianca Tamayo, Lance Mar, Danny Magsalin, Yifan Zhang, Ari Suchitphanit, and Derek Liang.)
- WP9. UCIHighlighter.com. 2014. Technical director for an interactive online system to help students differentiate among evidence, summary, and commentary in their academic writing. Targeted to reach 105,000 7-12<sup>th</sup> grade students through the i3 Pathway Project. Rebecca Black, Bill Tomlinson, and John McLear.
- WP8. ThisCausesThat.com. 2012. Community-generated online database of causal linkages among real-world topics. Collaboration with Rebecca Black, Raminder Singh Goraya, Duyet Nguyen, Joel Ross, Eugenia Gabrielova, Hsiao-Hsuan (Shelly) Yu, Dinorah Carrion Rodriguez, Daniel Lobato, Sahand Naye baziz, Jack Pan, Justin Saletta, and Anna Slykhous.
- WP7. Karunatree.com. 2010. Narrative-based environmental education site. Collaboration with Derek Lyons (project lead), Rebecca Black, Jennifer Long, Raminder Singh Goraya, Jason Lu, and Caroline Wagenaar.
- WP6. CanIBorrowYourGoat.com. 2010. Online resource sharing site for University Hills at UCIrvine. Collaboration with M. Six Silberman and Andrew Torrance.
- WP5. BetterCarbon.com. 2009-10. Carbon footprint calculator augmented with collaborative filtering system to improve accuracy with less information input. Collaboration with Joel Ross (project lead) and Nitin Shantharam.

- WP4. CalFireHelp. 2007. Community web site designed overnight with 20 undergraduates to help match evacuees from the 2007 California wildfires with host families. Available at <http://calfirehelp.com>
- WP3. Trackulous. 2007. Community web site designed to allow people to track things about their life – gas mileage, pages printed, etc. Focused on tracking relating to environmental issues, but also useful for health, fitness, relationships, etc. Available at <http://trackulous.com>
- WP2. GreenScanner. 2006. Community web site for mobile phones to access environmental reviews of consumer products via UPC codes. Collaboration with Joel Ross and several other students. Available at <http://greenscanner.net>
- WP1. ABCDecide. 2000. Community web site for asking and answering multiple choice questions about your life. Collaboration with Andrew Torrance.

#### *Software Systems*

- SS1. “Xylem,” (with Don Patterson). Lead programmer for a prototype of a sustainability-oriented cryptocurrency, 2021-2023.

#### *Educational Apps*

- EA1. “Seed Cycle,” (with Rebecca Black). Sole programmer for iPad app about plant growth and pollination, deployed 6/2011 through 5/2017. Over 11,200 copies sold, including more than 5,400 to educational institutions.

#### *Interactive Installations*

- I16. “Seed Cycle,” B. Tomlinson, R. Black. 2015. Cross-Pollinated: Hybrid Art Abuzz. Center for the Arts Gallery, Towson University, Towson, MD
- I15. “Plant Guild Composer: An Interactive Online System to Support Back Yard Food Production,” J. Norton, S. Nayeabaziz, S. Burke, B. J. Pan, B. Tomlinson. 2014. ACM CHI 2014 Conference, Interactivity Venue, Toronto, Ontario, Canada
- I14. “Dreaming of Adaptive Interface Agents,” B. Tomlinson, E. Baumer, M. L. Yau, P. MacAlpine, L. Canales, A. Correa, B. Hornick, A. Sharma. ACM CHI 2007 Conference, Interactivity Venue, San Jose, CA
- I13. “Normative Echoes: Use and manipulation of player generated content by communities of NPCs,” E. Baumer, B. Tomlinson, M. L. Yau, T. Alspaugh. AI in Interactive Digital Entertainment (AIIDE) conference, 2006, Marina del Rey, CA
- I12. “EcoRaft Project,” B. Tomlinson, M. L. Yau, E. Baumer, S. Goetz, L. Carpenter, R. Pratt, K. Young, C. May-Tobin, G. Chiang, B. Hornick, S. Marinov, U. McMahan, R. Moodey, E. Ramos, C. Yoho. Next05 Conference, 2005, Copenhagen, Denmark; Discovery Science Center, 2005, Santa Ana, CA;
- I11. “AlphaWolf,” B. Tomlinson, M. Downie, M. Berlin, J. Gray, A. Wong, R. Burke, D. Isla, Y. Ivanov, M. Johnson, D. Lyons, J. Cochran, B. Yong, B. Blumberg. Discovery Science Center, 2005, Santa Ana, CA
- I10. “Virtual Raft Project” B. Tomlinson, M. L. Yau, J. Gray, J. O’Connell, K. Williams, S. Yamaoka, S. Goetz, E. Baumer. ACM SIGGRAPH 2005, Emerging Technologies, Los Angeles, CA; Learning and Society 2005 Conference, Madison, WI; Computer Supported Collaborative Learning 2005 conference, Taipei, Taiwan; ACM CHI 2005 Conference, Interactivity Venue, Portland, OR
- I9. “AlphaWolf,” Computing Commons Gallery, 2004, Arizona State University, Tempe, AZ; Festival Int’l Nouveau Cinema Nouveaux Medias 2003, Montreal, Canada; Beall Center for Art and Technology, 2003, University of California, Irvine, CA; Kiasma, 2003, Future Cinema, Helsinki, Finland; ZKM Center for Art & Media, 2002-3, Future Cinema, Karlsruhe, Germany; Ars Electronica 2002, Linz, Austria; Game Developers Conference 2002, Morgan Kaufmann Booth, San Jose, CA; ACM SIGGRAPH 2001, Emerging Technologies, Los Angeles, CA.
- I8. “Difference Project,” B. Tomlinson *et al.*, Digital Media Alliance Florida Showcase 2003, Orlando, FL; UCF Digital Media 2003 Spring Showcase, Orlando, FL
- I7. “CyberFauna,” C. Breazeal *et al.*, Smithsonian National Design Triennial, Cooper-Hewitt National DesignMuseum, 2002, New York, NY
- I6. “sheep|dog: Trial by Eire,” B. Blumberg *et al.*, Electronic Entertainment Expo 2001, Los Angeles, CA

- I5. “sand:stone,” B. Tomlinson *et al.*, 7th New York Digital Salon, 1999, New York, NY
- I4. “(void\*): A Cast of Characters,” B. Blumberg *et al.*, ACM SIGGRAPH 99, Emerging Technologies, Los Angeles, CA
- I3. “Swamped!,” B. Blumberg *et al.*, ACM SIGGRAPH 98, Emerging Technologies, Orlando, FL
- I2. “Toco the Toucan,” D. Roy *et al.*, ACM SIGGRAPH 97, Emerging Technologies, Los Angeles, CA
- I1. “Boxed In,” B. Tomlinson and L. Tomlinson, ArtFronts Partnership, Philadelphia, PA

#### *Film Screenings/ Distribution*

- F2. “Shaft of Light,” Directed by B. Tomlinson, 16mm. stop-motion animated film.
  - a. Distribution: Anti-Defamation League in its Anti-Bias/Diversity Catalog.
  - b. Television: Sci-Fi Channel (‘00-‘01), Bravo Channel (‘97-‘00), Independent Film Channel (‘97-‘00)
  - c. Film Festivals: Sundance Film Festival ’97, and 20 other film festivals from ’96-‘98
- F1. “Boot Camp,” directed by Harvard College VES 50 class, 16 mm. documentary film.
  - a. Film Festival: Stanford University Film Festival

#### *Videos*

- V1. Introduction to Sustainability, 2014. [https://www.youtube.com/watch?v=3V5\\_ja5RtjY](https://www.youtube.com/watch?v=3V5_ja5RtjY) . In use at a University of the District of Columbia course (Sustainable Design I).

#### *Graphic Art*

- GA3. One chart and several pieces of AI-generated art displayed at Ephemeral Museum at SICT 2022 Doctoral Summer School.
- GA2. Cover Photograph for: B. Tomlinson, 2010, *Greening through IT*, MIT Press, Cambridge, MA.
- GA1. Cover Art for: V. Kaptelinin and B. A. Nardi, 2006, *Acting with Technology: Activity Theory and Interaction Design*, MIT Press, Cambridge, MA.

#### *Art Catalogs*

- A2. Synthetic Characters Group (B. Tomlinson, M. Downie, M. Berlin, J. Gray, A. Wong, R. Burke, D. Isla, Y. Ivanov, M. Johnson, D. Lyons, J. Cochran, B. Yong, B. Blumberg). 2003. “AlphaWolf.” In: J. Shaw and P. Weibel (eds.) *Future Cinema: The Cinematic Imaginary after Film*. MIT Press: Cambridge, MA. p. 458-459
- A1. Synthetic Characters Group (B. Tomlinson, M. Downie, A. Benbasat, J. Wahl, D. Stiehl, B. Blumberg). 1999. “sand:stone - Artist Statement.” In: *Leonardo*. Vol. 32, No. 5, p. 462-463.

## **EXTRAMURAL LECTURES & PRESENTATIONS**

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Presentations at SCILJ and Texas A&M

- L108. Co-presenter with Andrew Torrance, “Nobody Expects the Data Inquisition - Our Chief Weapon is AI’s!”, Southern California International Law Journal Symposium, 2025.
- L107. Co-presenter with Andrew Torrance, “Law for a Finite Planet”, Texas A&M Symposium, 2025.
- L106. Co-presenter with Andrew Torrance, “AI for Academic Research”, SubTech unconference on law and AI, Northwestern Law School, 2024.
- L105. Invited speaker, “ZotGraph: Engaging Students with Complex Topics through Knowledge Graphs”, 2024 AAAS-NSF IUSE Summit, Washington, DC.
- L104. Accepted Abstract, Julie Ferguson, Bill Tomlinson, Hayden Freedman, and Kameryn Denaro, “Developing student systems thinking and increasing engagement using ZotGraph”, Earth Educators' Rendezvous 2024, Philadelphia, PA
- L103. Invited speaker, “ZotGraph: A Collaborative Concept Mapping Tool for Encouraging Systems Thinking”, NSF Project Showcase, SIGCSE 2024, Portland, OR.



- L102. Co-presenter with Andrew Torrance, “If we could talk to the animals, how would we discuss their legal rights?”, Fordham Law School, 2024.
- L101. Invited lecture, “Sustainability and Computing: From Greening through IT to AI Governance”, University of California, Riverside, 2023.
- L100. Keynote, SICT 2022 Doctoral Summer School, “Building ICT in the Abundant Present for Use in a Future of Scarcity”.
- L99. Contributor, International Scholars Warning on Societal Disruption & Collapse  
<https://www.youtube.com/watch?v=f0frHoqXLB0>
- L98. Guest lecture, 2020, University of Southern California, Los Angeles, CA
- L97. Panelist, 2019, “Chain at the crossroads – Is this the end of the blockchain hype?” Victoria University of Wellington, Wellington, New Zealand
- L96. Guest lecture, 2019, University of Southern California, Los Angeles, CA
- L95. Lecture, 2018, Towson University Study Abroad Program, Wellington, NZ
- L94. Keynote, 2017, New Zealand Information Systems Doctoral Consortium, Wellington, NZ
- L93. Presenter (with first author Andrew Torrance), “A Simulation Experiment Study of Patent Troll Effects on Innovation,” 2017, 4th Annual Workshop on Empirical Studies of Intellectual Property, Cardozo Law School, New York, NY
- L92. Invited Speaker, 2016, Jacobs SRCD Interdisciplinary Research Workshop, Irvine, CA
- L91. Distinguished Lecture, 2016, University of Toronto, Toronto, Canada
- L90. Lecture, 2016, Victoria University of Wellington, Wellington, New Zealand
- L89. Lecture, 2016, University of Waikato, Hamilton, New Zealand
- L88. Lecture, 2015, University of Colorado Boulder, Boulder, CO
- L87. Visionary Panelist, Technolink Association’s President’s Club Forum, 2013, Los Angeles, CA
- L86. Invited Presenter, 19th Annual CNSF Capitol Hill Exhibition, Coalition for National Science Funding, 2013, Washington, DC
- L85. Invited Presenter, EMSI: Emerging Technologies & Science and the Imagination Conference, 2012, Arizona State University, Tempe, AZ
- L84. Invited Speaker, Science & Technology Section (STS) of the Association of College and Research Libraries (ACRL), 2012, Anaheim, CA
- L83. Invited Participant, National Research Council Symposium: Science, Innovation, and Partnerships for Sustainability Solutions, 2012, Washington, DC
- L82. Panelist, “Social Sustainability: An HCI Agenda,” CHI Conference, 2012, Austin, TX
- L81. Invited Speaker, Aston University, 2011, Birmingham, UK (delivered virtually)
- L80. Panelist, Law and Society Association 2011 Annual Meeting, San Francisco, CA
- L79. Presenter, CENIC 2011 conference, Irvine, CA
- L78. “Learning, Development, and Empowerment in Virtual Worlds for Young Children,” Digital Media & Learning Conference, 2011, Long Beach, CA (with Derek Lyons and Jennifer Long, delivered by Derek Lyons)
- L77. Plenary Speaker, NSF/CCC Workshop on IT and the Sustainability Enterprise, Role of Information Sciences and Engineering in Sustainability (RISES), 2011, Washington, DC
- L76. Presenter, Global IT Academy, 2011, Brea Olinda High School, Brea, CA
- L75. Visionary Panelist, Technolink Association’s President’s Club Forum, 2010, Los Angeles, CA
- L74. Invited Speaker, Information Technology and Innovation Foundation, 2010, Washington, DC (delivered

virtually)

- L73. Panelist, Workshop on Innovation in Computing and Information Technology for Sustainability, National Academies, 2010, Washington, DC
- L72. “Designing Games that Cultivate Environmental Literacy,” Games+Learning+Society 6.0 Conference, 2010, Madison, WI (delivered by collaborator Derek Lyons)
- L71. Panelist, Mining and Environmental Sustainability Panel, IEEE International Conference on Data Mining, 2009, Miami, FL (delivered virtually)
- L70. Visionary Speaker, Building Bridges Roundtable, 2009, Irvine, CA
- L69. Presenter, College Art Association, 2009 Annual Conference, Los Angeles, CA
- L68. Keynote Visionary Panelist, Technolink Association’s Technology Forecast, 2008, Los Angeles, CA
- L67. Panelist, Innovation and Globalization in Green conference, 2008, Irvine, CA
- L66. Presenter, American Marketing Association Summer Marketing Educators' Conference, 2008, San Diego, CA
- L65. Presenter, Ecological Society of America (ESA), 2008 Annual Meeting, Milwaukee, WI
- L64. Guest Lecture, Film 3250: Animation History and Practice, Prof. Lynn Tomlinson, 2008, Cornell U., Ithaca, NY
- L63. Presenter, OCTANe Meet the Researchers, 2008, Irvine, CA
- L62. Presenter, UC Day: UC Goes Green, 2008, Capitol Lawn, Sacramento, CA
- L61. Panelist, Beyond the Hype: Sustainability & HCI, CHI Conference, 2008, Florence, Italy
- L60. Presenter, Global IT Academy, 2008, Brea Olinda High School, Brea, CA
- L59. Lecture, National University of Singapore, 2007, Singapore
- L58. Panelist, “Real IP in a virtual world: IP issues arising out of virtual characters and scenes in online video games,” International Bar Association, 2007, Singapore
- L57. Presenter, Games + Learning + Society conference, 2007, Madison, WI
- L56. Presenter, Living Game Worlds III, Georgia Tech, 2007, Atlanta, GA
- L55. Workshop Leader, Sally Ride Science Festival for Girls, 2007, Irvine, CA
- L54. Presenter, Global IT Academy, 2007, Brea Olinda High School, Brea, CA
- L53. Visionary Panelist, Technolink Association’s Technology Forecast, 2006, Los Angeles, CA
- L52. Lecture, Osher Lifelong Learning Institute, 2006, Calit2, Irvine, CA
- L51. Panelist, Games for Change Conference, 2006, New York, NY
- L50. Presenter, Dell Executive Briefing, 2006, Austin, TX
- L49. Panelist, “The EcoRaft Project”, Massive: The Future of Networked Multiplayer Games, 2006, Calit2, Irvine, CA
- L48. Lecture, “Designing Multidevice Games for Museum-Based Ecology Education”, Game Developers Conference 2006, Serious Games Summit, San Jose, CA
- L47. Panelist, “Serious Games in 45-minutes: How Do We Make Classroom Learning Work”, Moderated by James Gee, Game Developers Conference 2006, Serious Games Summit, San Jose, CA
- L46. Research Presentation, Digitas, 2005, New York, NY
- L45. Lecture, Educational Communication & Technology program, 2005, New York University, New York, NY
- L44. Panelist, Games for Change Conference, 2005, New York, NY
- L43. Lecture, Institute of Applied Art, 2005, National Chiao Tung University, Hsinchu, Taiwan
- L42. Panelist, Workshop on Creative Industries, Consulate General of the Netherlands, 2005, Los Angeles, CA

- L41. Participant, Microsoft Research Social Computing Symposium, 2005, Redmond, WA
- L40. Guest Lecture, Human-Computer Interaction Seminar, Prof. Terry Winograd, 2005, Stanford University, Stanford, CA
- L39. Visionary Panelist, Technolink Association's Technology Forecast, 2004, Los Angeles, CA
- L38. Participant, Collaboration in Ecology: A Workshop, 2004, University of California, Irvine, CA
- L37. Workshop Leader (with Sara Goetz), Science Festival for Girls, Sally Ride Science Club, 2004, Irvine, CA
- L36. Artist's Lecture, 2004, Arizona State University, Tempe, AZ
- L35. Cornell SIGCHI Distinguished Lecturer Series, 2004, Cornell University, Ithaca, NY
- L34. Panelist, Self-Organizing Systems Conference: rEvolutionary Art, Science and Literature, 2004, University of California, Los Angeles, CA
- L33. Lecture, ACM SIGCHI, Orange County Chapter, 2004, Irvine, CA
- L32. Guest Lecture, Film 324: Experimental + Traditional Animation Workshop, Prof. Lynn Tomlinson, 2004, Cornell University, Ithaca, NY
- L31. Artist's Lecture, Festival Nouveau Cinema Nouveaux Media, 2003, Montreal, Canada
- L30. Meet the Artists, Beall Center for Art + Technology, 2003, University of California, Irvine, CA
- L29. Lecture, Department of Design | Media Arts, 2003, University of California, Los Angeles, CA
- L28. Lecture, Computer Science Department, 2003, University of California, Los Angeles, CA
- L27. Lecture, Institute for Studies in the Arts, 2003, Arizona State University, Tempe, AZ
- L26. Lecture, 2003, Hampshire College, Amherst, MA
- L25. Lecture, ACE Program, 2003, University of California, Irvine, CA
- L24. Lecture, Interactive Media Program, 2003, University of Southern California, Los Angeles, CA
- L23. Lecture, Program in Technocultural Studies, 2003, University of California, Davis, CA
- L22. Lecture, Association for Computing Machinery (ACM), UCF Chapter, 2003, Orlando, FL
- L21. Roundtable participant, "At the Intersection of Art and Science," Southern California Conference on Undergraduate Research, 2002, CalTech, Pasadena, CA
- L20. Lecture, Institute for Creative Technologies, 2002, University of Southern California, Marina del Rey, CA
- L19. Lecture, College for Creative Studies, 2002, Detroit, MI
- L18. Lecture, Center for Research in Computing and the Arts, 2002, University of California, San Diego, CA
- L17. Lecture, School of Electrical Engineering and Computer Science, 2002, University of Central Florida, Orlando, FL
- L16. A. Louis Medin Modeling & Simulation Seminar Series, Texts & Technology Program and Institute for Simulation & Training, 2002, University of Central Florida, Orlando, FL
- L15. Lecture, iEAR Studio, 2002, Rensselaer Polytechnic Institute, Troy, NY
- L14. Lecture, Division of Animation & Digital Arts, 2002, University of Southern California, Los Angeles, CA
- L13. Guest Lecture, Media Studies, Prof. Machiko Kusahara, 2002, University of California, Los Angeles, CA
- L12. Cambridge University Moving Image Studio/MIT workshop, 2001, Cambridge University, Cambridge, UK
- L11. Keynote (for B. Blumberg), International Conference on Virtual Storytelling, 2001, Avignon, France
- L10. Workshop Leader (with Prof. B. Blumberg and Prof. C. Breazeal), "Workshop on Embodied Presence," 2001 Fall Sponsor Week, The Media Laboratory, Massachusetts Institute of Technology, Cambridge, MA
- L9. Lecture, Metapolis Think Tank, 2001, Barcelona, Catalonia, Spain

- L8. Lecture, Entertainment in the Interactive Age conference, 2001, University of Southern California, Los Angeles, CA
- L7. Lecture, Future Film Festival, 2001, Bologna, Italy
- L6. Lecture (with R. Burke), Living Architectures Summit, 2000, New Media Institute, Banff, Canada
- L5. Lecture, FMX2K, 2000, Stuttgart, Germany
- L4. Paradigm Lecture Series, 2000, University of the Arts, Philadelphia, PA
- L3. Lecture, Eliot House Senior Common Room, 1998, Harvard University, Cambridge, MA
- L2. Lecture, Tokyo Toy Show, 1998, Tokyo, Japan
- L1. Artist's Lecture, Uppsala International Short Film Festival, 1996, Uppsala, Sweden

## **COURSES TAUGHT**

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Global Disruption and Information Technology, undergraduate course (online), UC system	WQ2015, FQ2015, FQ2016, FQ2018, FQ2019, FQ2020 SQ 2021, FQ2021, SQ2022, FQ2022, SQ2023
Information Technology in Global Sustainability, graduate course, UCI	FQ2009, SQ2015, SQ2017, SQ2020, SQ2022
IT and the New Organisation, honours course, with A. Goulding, J. Cranefield, VUW	T2_2017, T1_2018
Special Topic: Information Systems for Sustainability, undergraduate course, with J. Toland, VUW	T1_2018
Foundations of Information Systems, undergraduate course, with A. Sylvester, VUW	T1_2018
IT, Innovation, Value & Productivity, honours course, with J.-G. Bernard, VUW	T2_2018
Capstone Project in HCI and Design, graduate course, UCI	SQ2017
Projects in User Interface Software, undergraduate course, UCI	SQ2015, WQ2017
Introduction to Ubiquitous Computing, graduate course, UCI	SQ2014
Research Methods, graduate course, UCI	FQ2011, FQ2012
Game Technologies and Interactive Media, undergraduate course, UCI	SQ2011, SQ2012
Environmental Issues in Information Technology, undergraduate course, UCI	SQ2009, WQ2011, WQ2012, WQ 2013, FQ2013
Advanced User Interface Architecture, graduate course, UCI	SQ2008
Social Analysis of Computerization, undergraduate course, UCI	WQ2005, SQ2006, SQ2007, FQ2007, FQ2008, FQ2009
Computer Games as Art, Culture & Technology, first-year undergrad. course, UCI	FQ2008-SQ2009, FQ2007-SQ2008, FQ2006-SQ2007
Informatics Graduate Seminar, UCI	SQ2007
Script Analysis, graduate course, UCI	WQ2006
Programming for Interactivity, graduate course, UCI	FQ2005
Computer Game Development, undergraduate course, UCI	SQ2005
Performance Theory, graduate course, UCI	FQ2004
Biomorphic Computing, graduate course, UCI	WQ2004
Autonomous Characters, graduate course, UCI	FQ2003

## **INTRAMURAL LECTURES & PRESENTATIONS**

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- IS59. Discussant, Kim Stanley Robinson visit, The Forum for the Academy and the Public, UCI

- IS58. Speaker, AI for Personalized and Culturally Relevant Learning, Connected Learning Lab, UCI
- IS57. Speaker, “ZotGraph: A Collaborative Concept Mapping Tool for Encouraging Systems Thinking”, Generative AI Panel, 2024, UCI
- IL56. Guest Lecture, Informatics 190: Climate XR, Prof. Andre van der Hoek, 2022, UCI
- IL55. Recorded Lecture, “Toward Sustainability,” Reimagining UCI in a Climate-Changed World, 2022, UCI
- IL54. Guest Lecture, Informatics 131: Human Computer Interaction, Instructor: Matt Bietz, 2018, UCI
- IL53. Guest Lecture, Informatics 133: User Interaction Software, Instructor: Daniel Epstein, 2018, UCI
- IL52. Guest Lecture, ICS 90: First Year Seminar, Instructors: Rich Pattis and David Kay, 2018, UCI
- IL51. Guest Lecture, MMIM 580 Sustainability and Information Systems, Dr. Janet Toland, 2017, VUW
- IL50. Guest Lecture, INFO513: Quantitative Research Methods, 2017, VUW
- IL49. Panelist, Writing the Future Symposium, 2017, UCI
- IL48. Guest Lecture, ICS 60: Computer Games and Society, Prof. Rebecca Black, 2017, UCI
- IL47. Guest Lecture, ICS 60: Computer Games and Society, Prof. Rebecca Black, 2016, UCI
- IL46. Computing with Limits Public Discussion, Newkirk Center for Science and Society, 2015, Irvine, CA
- IL45. TEDxUCIrvine, 2014, Irvine, CA
- IL44. Panelist, Edible Education conference, 2014, UCI
- IL43. Guest Lecture, US 10 Intro to Civic and Community Engagement, Prof. Gillian Hayes, 2012, UCI
- IL42. Guest Lecture, Informatics 161: Social Analysis of Computerization, Prof. Melissa Mazmanian, 2012, UCI
- IL41. Distinguished Lecturer, COSMOS-UCI, 2012, Irvine, CA
- IL40. Guest Lecture, ICS 90: First Year Seminar, Instructors: Rich Pattis and David Kay , 2011, UCI
- IL39. Guest Lecture, Informatics 161: Social Analysis of Computerization, Prof. Melissa Mazmanian, 2011, UCI
- IL38. Lecture (with Andrew Torrance), “The Patent Game”, Interdisciplinary Legal Studies Workshop, 2011, UCI Law School (to appear)
- IL37. Lecture, AISICS program, 2011, UCI
- IL36. Guest Lecture, Informatics 161: Social Analysis of Computerization, Prof. Melissa Mazmanian, 2011, UCI
- IL35. Lecture, Informatics Seminar, 2011, UCI
- IL34. Lecture, Sustainable Energy Technology Club, 2011, UCI
- IL33. Lecture, AISICS program, 2010, UCI
- IL32. Guest Lecture, Informatics 161, Prof. Melissa Mazmanian, 2010, UCI
- IL31. Lecture, “Green Information Technology”, Sustainability Seminar Series, Center for Unconventional Security Affairs, 2010, UCI
- IL30. Guest Lecture, Engineering 15: Problem Solving in Engineering, 2009, UCI
- IL29. Two Lectures, AISICS program, 2009, UCI
- IL28. Two Lectures, AISICS program, 2008, UCI
- IL27. Lecture, SURF-IT program, 2008, Calit2, UCI
- IL26. Lecture, CRITO Hour, 2008, Center for Research on Information Technology and Organizations, UCI
- IL25. Guest Lecture, Informatics 44, Prof. Bonnie Nardi, 2008, UCI
- IL24. Lecture, Focus the Nation, 2008, UCI
- IL23. Panelist, Games 3.0, Calit2, 2007, UCI

- IL22. Guest Lecture, Informatics 44, Prof. David Redmiles, 2007, UCI
- IL21. Guest Lecture, Informatics 163: Projects – Social/Org. Impacts of Computing, Prof. Bonnie Nardi, 2007, UCI
- IL20. Lecture, SURF-IT program, 2007, Calit2, UCI
- IL19. Invited Lecture, Honors Experience Day, Campuswide Honors Program, 2007, UCI
- IL18. Guest Lecture, CSE 90: Introduction to Systems Engineering, Prof. Jeff Foresta, 2007, UCI
- IL17. Lecture, SURF-IT program, 2006, Calit2, UCI
- IL16. Guest Lecture, Informatics 44: Seminar in Informatics, Prof. Roberta Lamb, 2006, UCI
- IL15. Guest Lecture, Film & Media Studies 112: Genre Study, Prof. Peter Krapp, 2005, UCI
- IL14. Guest Lecture, Film & Media Studies 85C: New Technologies and Visuality, Prof. Peter Krapp, 2005, UCI
- IL13. Guest Lecture, Informatics 44: Seminar in Informatics, Prof. Andre van der 2028, 2005, UCI
- IL12. Guest Lecture, ICS 131: Social Analysis of Computerization, Prof. Bonnie Nardi, 2005, UCI
- IL11. Lecture, SURF-IT program, 2005, Calit2, UCI
- IL10. Program Leader, Mesa Court Undergraduate Housing, 2005, UCI
- IL9. Presenter, Arts Dean’s Leadership Council, 2005, UCI
- IL8. Guest Lecture, ICS 200: Seminar in Research, 2004, UCI
- IL7. Seminar Leader, Faculty Forum, “Combining the Arts, Computation and Engineering,” 2004, UCI
- IL6. Guest Lecture, Arts 1E: Digital Core, Prof. John Crawford, 2004, UCI
- IL5. Guest Lecture, ICS 131: Social Analysis of Computerization, Prof. Bonnie Nardi, 2004, UCI
- IL4. Guest Lecture, UCI Arts 1D: Digital Core, Prof. John Crawford, 2004, UCI
- IL3. Guest Lecture, ICS 131: Social Analysis of Computerization, Prof. David Redmiles, 2003, UCI
- IL2. Guest Lecture, ICS 197/200: Honors Seminar, 2003, UCI
- IL1. Guest Lecture, Introduction to Media Studies, Prof. Glorianna Davenport, 1998, MIT

## PROFESSIONAL SERVICE

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Organizing Committee, ACM Workshop on Computing within Limits	2015-16, 2018-21, 2025
Program Committee, AAMAS 2025 ALA Workshop	2025
Reviewer, DIS conference	2025
Arch Mission, Strategic Advisor	2019-2023
Reviewer, JSIS	2023
Reviewer, JCSS	2023
Reviewer, AMCIS	2021
Reviewer, ACM CHI Conference on Human Factors in Computing Systems	2008-10, 2012-14, 2017, 2020, 2021
Reviewer, Hawaii International Conference on Systems Sciences	2020
Reviewer, ACM Computer-Supported Cooperative Work conference	2020
Quest Curation Volunteer, United Nations Environment Programme/TED-Ed Earth School	2020
Session Chair, Environmental Peacebuilding Conference	2019
Reviewer, Human-Computer Interaction journal	2019
Program Committee, ICT4S Conference	2014, 2019
Reviewer, ACM Transactions on Computer-Human Interaction (TOCHI)	2006, 2010, 2018, 2019

Reviewer, IEEE Software	2018
Reviewer, ACM SIGMIS CPR	2018
Participant, New Zealand Ministry for the Environment Natural Capital Project Workshop	2017
Reviewer, New Zealand Information Systems Doctoral Consortium	2017
Board of Scientific Counselors, US Environmental Protection Agency (EPA), Sustainable and Healthy Communities Subcommittee	2014-2017
Co-Chair, Third Workshop on Computing within Limits	2017
Advisory Board Member, NSF ISE-funded project Meteor at University of Central Florida	2011-2014
Program Committee, Workshop on ICT for Sustainability at iConference 2015	2015
Reviewer, Taylor & Francis	2013
Member, Nature Reserve of Orange County's (NROC) Science Panel	2013
Reviewer, MIT Press	2008, 2012, 2013
Reviewer, Ubicomp 2012	2012
Reviewer, National Research Council report on Computing Research for Environmental and Societal Sustainability	2012
Program Committee, REFSQ 1st Int'l Workshop on Requirements Engineering for Sustainable Systems	2012
Associate Chair, DIS 2012 Programme Committee	2012
Reviewer, CSCW 2012, 2013	2011, 2012
Reviewer, Environmental Science & Technology Journal	2011
Program Committee, AAAI Spring Symposium on Artificial Intelligence and Sustainable Design	2010
Reviewer, IEEE IT Professional, Green IT Special Issue	2010
Site Visit Team, National Science Foundation	2010
Workshop Co-Organizer, Examining Appropriation, Re-use, and Maintenance for Sustainability, ACM CHI Conference on Human Factors in Computing Systems (with Eli Blevis, Daniela Busse, Jina Huh, Lisa Nathan, Phoebe Sengers, and Six Silberman)	2010
Session Chair, "Crisis Informatics," ACM CHI Conference on Human Factors in Computing Systems	2010
Reviewer, ACM DIS Conference	2010
Workshop Co-Organizer, Defining the Role of HCI in the Challenges of Sustainability, ACM CHI Conference on Human Factors in Computing Systems (with Elaine Huang, Eli Blevis, Jen Mankoff, and Lisa Nathan)	2009
Review Panelist, National Science Foundation (two directorates, five panels, chair of one panel)	2005-2008
Reviewer, Morgan Kaufmann Publishers	2004, 2008
Program Committee, Autonomous Agents and Multiagent Systems (AAMAS) conference (Special Track on Virtual Agents)	2008
Reviewer, IEEE Computer Graphics and Applications journal	2007
Organizer, Panel on the Global Environment and Digital Media, ACM SIGGRAPH Art Gallery Panelists: William Brent (UCSD), Heitor Capuzzo (FUMG), Natalie Jeremijenko (UCSD), Michael Moshell (UCF), Vibeke Sorensen (ASU), Shahrokh Yadegari (UCSD)	2007
Reviewer, ACM SIGGRAPH Conference, Art Gallery	2007
Co-Organizer, Workshop on the State of the Art in Academic Computer Game Research (with Bonnie Nardi) Included 20 game researchers from universities and research labs.	2006
Reviewer, American Educational Research Association (AERA)	2006

Session Chair, ACM SIGGRAPH Emerging Technologies Sketches	2006
Organizer, Museums and Games Panel, Games for Change conference Panelists: H. Borrelli (AMNH), C. Brunner (CCT), L. Majzlin (NYU), R. O'Neill (Pratt)	2006
Reviewer, International Symposium on Mixed and Augmented Reality (ISMAR 06)	2006
Reviewer, Adaptive Behavior, Special Issue on Mechanisms of Action Selection	2006
Reviewer, International Journal of Continuing Engineering Education and Life Long Learning	2006
Jury, SIGGRAPH 2006 Emerging Technologies program	2006
Program Committee, SID 2006: Social Intelligence Design	2006
Member, Scientific and Creative Advisory Board, The Darwin Project, Boston, MA	2004-2005
Reviewer, Netherlands Organization for Scientific Research	2004
Reviewer, NASA Research in Intelligent Systems	2004
Reviewer, ACM Transactions on Computer-Human Interaction	2003
Reviewer, IEEE MultiMedia	2003
Program Committee, International Conference on Virtual Storytelling	2003
Organizer, NextArt Interactive Media Forum, Florida Film Festival Panelists: Rebecca Allen (UCLA), Ken Perlin (NYU)	2003
Reviewer, International Journal of Human-Computer Studies Special Issue on Applications of Affective Computing in Human-Computer Interaction	2002
Session Chair, Emotions in social behavior and adaptation II & III, AAAI Fall Symposium	2001

## UNIVERSITY SERVICE

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### At UCI

Division Council, California Institute for Telecommunications & Information Technology	2005-present
Vice Chair, Informatics Department	2018-present
Advisory Board, UCI Paul Merage School of Business Center for Global Leadership and Sustainability	2019-present
Executive Board, UCI Solutions that Scale Initiative	2020-present
AP Analyst Hiring Committee	2024
Dean's Search Committee, Claire Trevor School of the Arts	2021-22
UCI Engage Internal Advisory Board	2018-2022
Academic Senate Council on Planning and Budget	2018-22
Student Fellowship Supervisor, DREAM Fellow Program	2019
Member, Sustainability Education Task Force	2012-2017
Technical Director, ICS Center for Research in Sustainability, Collapse-Preparedness & IT (RiSCIT)	2013-2017
Executive Committee, Master of Human-Computer Interaction and Design	2015-2017
Informatics Ad Hoc Lecturer Reviewer (online)	2017
Chair, Informatics Major Steering Committee	2016-2017
Vice Chair for Graduate Affairs, Informatics Department	2012-2014, 2015 (Fall)
Mentor, Calit2 Multidisciplinary Design Program	2011-15
Advisory Circle, Global Sustainability Resource Center	2012-14
Informatics Graduate Student Association Faculty Advisor	2012-2014



Chair, ICS Graduate Policy Committee	2013-2014
Contributed one of four research summaries to UCI's "innovation" section for Sierra Club annual rankings. UCI received perfect score for innovation, and 3 <sup>rd</sup> coolest school overall.	2013
Informatics Undergraduate Recruiting and Outreach Committee	2011-12
ICS Executive Committee (vice chair)	2011-12
ICS Computer Game Science Steering Committee	2011-12
Informatics Development Committee	2012
Graduate Recruiting and Outreach Committee (chair), Department of Informatics, UCI	2010-2011
ICS Committee on Administration and Resources	2011
Participant, Discussion Group, UC Office of the President communications group	2010
Informatics Department Chair Recommendation Committee	2010
Member, Ad Hoc Drafting Committee, Global Sustainability Major, UCI	2010
Mentor, hITEC Entrepreneurship Competition, Bren School of ICS, UCI	2010
Program Faculty, Arts Computation Engineering (ACE) program	2006-2010
Graduate Policy Recruitment and Admissions Committee, Bren School of ICS, UCI	2007-2010
Student Outreach, Access and Retention Board, Bren School of ICS, UCI	2009-2010
Graduate Admission, Recruiting and Outreach Committee (chair), Department of Informatics, UCI	2007-2009
Mentor, NSF Mt. SAC STEM Summer Bridge Program	2009
Undergraduate Recruiting and Outreach Committee, Department of Informatics, UCI	2006-2007
Student Outreach, Access and Retention Board, Bren School of ICS, UCI	2005-2007
Mentor, CA MESA Advanced Science and Technology Academies of Research	2007
Calit2 Emulex Fellow Review Committee	2006
Associate Director for External Relations, ACE Program, UCI Responsible for fundraising, recruitment of students and other external relations duties.	2005-2006
Admissions Committee, Department of Informatics, UCI	2004-2006
Academic Senate Committee on Student Experience, UCI	2004-2006
Founding Faculty and Core Faculty, ACE program, UCI Contributed to the design and development of a multidisciplinary graduate program: admissions, curriculum, facilities, website, lecture series, fundraising and student orientation & mentoring. ICS School Liaison. Advisor, Inaugural Graduation Show 2005.	2003-2006
Publicity Committee, Department of Informatics, UCI	2004
Faculty Advisor, Digital Media Spring Showcase, UCF	2003
Organizer, MIT Media Lab Colloquium Guest Speaker: Jules Engel, Founder and Director, CalArts Experimental Animation Program	1998

#### At VUW

PBRF Internal Review Panel	2018
School of Information Management Research Degrees Committee	2017-2018
Sustainability and Resilience Theme Steering Committee	2017-2018

#### INCLUSIVE EXCELLENCE CONTRIBUTIONS

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UC Online Award, \$40,000, “ICS5: Global Disruption and Information Technology”, PI. (also listed in Intramural Honors above. This award supports our effort to revamp the content of this course to more effectively address issues of digital inclusion.)	2023-2024
Participant, UCI Informatics Equitable Pedagogy working group	Summer 2020
UCI Highlighter project is being used to teach in public schools to help support academic literacy and achievement of students from marginalize populations.	2019-2020
Supervised student fellowship through UCI DREAM Fellow Program to support undocumented students through professional development.	2019
Co-PI on grant funded through NSF Broadening Participation in Computing program to create summer program for Native American students to engage with computer science.	2008-2011
Provided curriculum and staff for Girls, Inc. summer program through NSF EAGER grant.	2010
Supervised two students in CA MESA Advanced Science and Technology Academies of Research program. MESA enables educationally disadvantaged students to prepare for and graduate from a four-year college or university with a math-based degree in areas such as engineering, computer science, and mathematics.	2007
Supervised a student in MARC (Minority Access to Research Careers) scholar program. This program seeks to increase the number of underrepresented minority (URM) researchers.	2006

## UNIVERSITY AFFILIATIONS

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Researcher, California Institute for Telecommunications and Information Technology (Calit2)	2003-present
UCI Center for Machine Learning and Intelligent Systems, Affiliated Faculty	2007-present
UCI Civic and Community Engagement minor, Affiliated Faculty	2008-present
UCI Institute for Virtual Environments and Computer Games, Affiliated Faculty	2009-present
UCI's Steckler Center for Responsible, Ethical, and Accessible Technology (CREATE)	2021-present
UCI ACE Program, Program Faculty	2003-2010
UC Game Culture & Technology Lab	2003-2010
UCI Ada Byron Research Center, Affiliated Faculty	2003-2010

## RESEARCH SUPERVISION

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<i>Post-Doctoral Scholars</i>	
Neil Young	2018-2019
Birgit Penzenstadler	2013-2014
Derek Lyons	2009-2011
Eric Baumer	2009-2010
<i>Doctoral Students</i>	
Hayden Freedman (Advisor)	2020-present
Matthew Dressa (Advancement Committee Member)	2024
Samantha McDonald (Advancement Committee Member)	2019-2020
Juliet Norton, UCI Informatics (Advisor)	2013-2019
Ankita Raturi (Co-Advisor)	2013-2018
Neil Young (Advisor)	2013-2018
Samantha McDonald (Co-Advisor)	2016-2017
Maruf Zaber (Co-Advisor, Advancement Committee Member)	2016-2018
Sen Hirano (Advancement Committee Member, Dissertation Committee Member)	2013-2017
Kate Ringland (Advancement Committee Member)	2015-2016
Michael (Six) Silberman, UCI Informatics (Advisor, Co-Advisor) Now Project Secretary at IG Metall	2009-2010, 2013-2015
Lynn Dombrowski (Advancement Committee Member)	2013-2014
Arjun Satish, UCI CS (Advancement Committee Member, Dissertation Proposal Committee)	2010-2013

Joel Ross, UCI Informatics (Advisor)	2007-2012
Now Senior Lecturer at the University of Washington.	
Recipient of UCI's 2012 Most Promising Future Faculty Member Award.	
Eugenia Gabrielova, UCI Informatics (Advisor)	2011-2012
Tawanna Dillahunt, Carnegie Mellon, (External Member of Dissertation Committee)	2011-2012
Meg Cramer, UCI Informatics (Advancement Committee Member)	2011-2012
Tina Matuchniak, UCI Education (Dissertation Proposal Committee Member)	2011
Janice Hansen, UCI Education (Dissertation Proposal Committee Member)	2012
George Azzari, UCI Earth System Science (Advancement Committee Member)	2011
Nadine Amsel, UCI Informatics (Advisor)	2008-2010
Eric Kabisch, UCI Informatics (Advancement Committee Member)	2008-2009
Eric Baumer, UCI Informatics (Advisor)	2004-2009
Now Assistant Professor at Lehigh University.	
Jeff Ridenour, UCI ICS (Advancement Committee Member)	2005-2007
Man Lok Yau, UCI ICS (Advisor)	2004-2007
Garnet Hertz, UCI Film & Media Studies (Advancement Committee Member)	2007
So Yamaoka, UCI Engineering program (Advancement Committee Member)	2006
Riley Pratt, UCI Ecology and Evolutionary Biology (Advancement Committee Member)	2006
Danielle Vellucci, UCI Chemistry (Advancement Committee Member)	2006
Justin Harris, UCI ICS (Advancement Committee Member)	2006

#### *Master's Students*

Sophie van Genderen (Member)	2023
Qingyu Song (Research supervisor)	2022
Meena Muralikumar (Member)	2019-2020
Vishal Sharma (Member)	2019-2020
Jeff Lee (Member)	2014-2015
Ankita Raturi (Chair)	2010-2012
Raminder Goraya (Research supervisor)	2010-2012
Nitin Shantharam (Member)	2011-2012
Tommy Chheng (Chair)	2009-2010
Josef Nguyen (Member)	2008-2009
Michael (Six) Silberman (Member)	2008-2009
Phoebe Lin, UCI ICS (Member)	2009
Priya Venkateshan (Research supervisor)	2009
Mark Roland, UCI ACE program (Member)	2007-2008
Amy Lewis, UCI ACE program (Member)	2007
Greg Elliott, UCI ACE program (Member)	2005-2007
Matthew Cox, University of Miami MFA animation program (Member)	2005-2006
J. Adrian Herbez, UCI ACE program (Chair)	2004-2005
Sara Goetz, UCI ACE program (Research supervisor)	2004-2005
So Yamaoka, UCI ACE program (Research supervisor)	2003-2004

#### *Honors Undergraduate Students*

Xin Hu	2016-2017
Jari-lee (Jay) Tolentino	2013-2014
David Conley	2013-2014
Sean Burke	2013
Anna Slykhous	2011-2013
Oliver Holmes	2011
Nitin Shantharam	2007-2010
Andrew Zaldivar	2007-2009
Robert Simpson	2008-2009
Lauren Lewis	2008
David Hubin	2007-2008
Paul Mac Alpine	2006-2008
Andrew Correa	2006-2007

Jared Beam	2005-2007
Zack (Gang) Ji	2006-2007
Uel McMahan	2004-2006
Dung Nguyen	2003-2005
Nathan Ie	2003-2005

Including the students above, Professor Tomlinson has supervised more than 100 undergraduate researchers at MIT, UCF and UCI from 1997-present. These students have gone on to graduate and professional programs at MIT (5), Carnegie Mellon (4), USC (3), UCI (2), UCLA (2), Georgia Tech, UCSD, and the University of Washington, and to professional positions at Google (2), Amazon, Deloitte, Siemens, Raytheon, IBM, Rockwell Collins, Sony, Twitter, Square, Obsidian Entertainment, Irrational Games, Insomniac Games, and Carnegie Mellon's Robotics Institute. They have received awards including a Fulbright, several Calir2 SURF-IT grants, several ICS Butterworth awards for entrepreneurial student projects, and numerous UCI SURP and UROP grants.

## OTHER APPOINTMENTS

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<i>Mattel, Inc.</i> , Intern, Design & Development Department	Jan. 1999
<i>Aquent, Inc.</i> , Web Designer and Graphic Designer	1996-1997

## SELECTED NEWS ARTICLES AND REVIEWS

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"A free California? Trump visits as initiative to leave U.S. cleared to gather signatures," Elizabeth Weise and Josh Peter, 1/24/25, USA Today, <https://www.usatoday.com/story/news/nation/2025/01/24/country-of-california-secession-newsom-trump/77907859007/>

"AI drive brings Microsoft's 'green moonshot' down to earth in west London," Dan Milmo and Alex Hern, 6/29/24, The Guardian, <https://www.theguardian.com/business/article/2024/jun/29/ai-drive-brings-microsofts-green-moonshot-down-to-earth-in-west-london>

"Scientists' Warning on Technology", Climate Emergency Forum, 5/5/24, [https://www.youtube.com/watch?v=j\\_xdGGFTSe8](https://www.youtube.com/watch?v=j_xdGGFTSe8)

"AI More Energy Efficient than Humans, New Study Finds," Sabine Hossenfelder, 4/19/24, <https://www.youtube.com/watch?v=5ayaXOVb9IU>

"How much energy does AI use compared to humans? Surprising study ignites controversy," Bryson Masse, Venture Beat, 9/22/23, <https://venturebeat.com/ai/how-much-energy-does-ai-use-compared-to-humans-surprising-study-ignites-controversy/>

"AI-Driven Creators Are Better For The Environment Than Humans, Says New Study," Mark Tyson, Tom's Hardware, 9/22/23, <https://www.tomshardware.com/news/ai-driven-creators-are-better-for-the-environment-than-humans-says-new-study>

"Very interesting paper: using generative AI to produce text or images emits 3 to 4 orders of magnitude \*less\* CO2 than doing it manually or with the help of a computer." Yann LeCun, Chief AI Scientist at Facebook/Meta, 9/19/23, <https://twitter.com/ylecun/status/1704098609535320365>

"The environmental impact of AI is about comparisons." Ethan Mollick, 9/17/2023. <https://www.linkedin.com/feed/update/urn:li:activity:7109274571370831873/>

"ChatGPT in research and scholarly writing," SARUA - Southern African Regional Universities Association, 8/23/23, <https://www.linkedin.com/pulse/chatgpt-research-scholarly-writing/>

"Tomlinson, Patterson & Torrance on The A.I. Training Set as a Trojan Horse of Misinformation." Frank Fagan. 8/17/23. AI Law Blawg. <https://ailawblawg.com/2023/08/17/tomlinson-patterson-torrance-on-the-a-i-training-set-as-a-trojan-horse-of-misinformation/>

"Sustainable farming: How technology can optimize food production." Jessie Cohen. 7/6/23. Scripps News. <https://scrippsnews.com/stories/sustainable-farming-how-technology-can-optimize-food-production>

"Torrance & Tomlinson on AI Training and Fair Use." Lawrence Solum, 5/15/23. Legal Theory Blog. <https://lsolum.typepad.com/legaltheory/2023/05/torrance-tomlinson-on-ai-training-and-fair-use.html>

“After the fall - a guide to post-collapse technology.” Danny Bradbury, 4/28/23, Diginomica.com.  
<https://diginomica.com/after-fall-guide-post-collapse-technology>

“Using Snowflake to Access and Combine Multiple Datasets Hosted by the Amazon Sustainability Data Initiative.” Aaron Soto, Andries Engelbrecht, and Bosco Albuquerque, 4/7/22,  
<https://aws.amazon.com/blogs/apn/using-snowflake-to-access-and-combine-multiple-datasets-hosted-by-the-amazon-sustainability-data-initiative/>

“Post Growth Toolkit”, Interview on Collapse Informatics, Negatechnology, and Self-Obviating Systems as part of online interactive art exhibit. <http://www.postgrowth.art/>

“Earth School launched to keep students connected to nature,” TED-Ed, 4/21/20,  
<https://www.unenvironment.org/news-and-stories/press-release/earth-school-launches-keep-students-connected-nature-time-covid-19>

Articles about this project were also included in Discover Magazine, Inhabitat, TED-Ed, Astronomy Magazine, NowThis, and numerous other venues.

“People are building technology that could survive the apocalypse,” Steven Melendez, Fast Company, 11/08/19, <https://www.fastcompany.com/90414972/what-would-happen-to-the-internet-if-society-collapsed>

“Culture File: Computing Within Limits with Aisling Kelliher,” Irish National Radio, 11/8/18,  
[https://soundcloud.com/soundsdoable/culture-file-computing-within?fbclid=IwAR36\\_gHDNmJJM1aHcrt8sNefSPpeiDD4XCIf1QejlxKY4BanG3ooeq-I43A](https://soundcloud.com/soundsdoable/culture-file-computing-within?fbclid=IwAR36_gHDNmJJM1aHcrt8sNefSPpeiDD4XCIf1QejlxKY4BanG3ooeq-I43A)

“Half-Baked Schemes: The B-Side of Kits,” C. Saper, Hyperrhiz. 2015,  
<http://hyperrhiz.io/hyperrhiz13/reviews/saper.html>

“Cyborg angst: 5 ways computers will perplex us in 2039,” A. Rutkin, New Scientist, 4/20/14, reposted by BBC.com, 5/7/14, <http://www.newscientist.com/article/dn25493-cyborg-angst-5-ways-computers-will-perplex-us-in-2039.html#.U8R1X41dVjE>

“Electronics Waste Programs Ineffective in Most U.S. States,” M. Anderson, IEEE Spectrum, 9/11/13  
<http://spectrum.ieee.org/energy/environment/electronics-waste-programs-ineffective-in-most-us-states>

Interview, Sustainable Lens: Resilience on Radio, Otago Access Radio/Podcast, S. Mann, 6/1/12.

Review of “Greening through IT: Information technology for environmental sustainability,” R. Cleland, Review of Policy Research, Vol. 28(6), 2011.

“Les brevets freinent-ils l’innovation?” Paris Tech Review, 9/23/11.

Review of “Greening through IT: Information technology for environmental sustainability,” M. Maldonado, Environmental Politics, Vol. 20(4), 2011

Review of “The Seed Cycle,” 4.5/5 stars. bestappsforkids.com, 6/14/11.

Review of “Greening Through IT: Information Technology for Environmental Sustainability,” E. Bleviss, Environmental Health Perspectives, 2011

“Broadening Horizons through Information Technology,” L. Nathan, ACM Interactions, Nov/Dec 2010

“Can Computer Code Be Greener? Facebook Thinks So,” D. Zax, FastCompany.com, 11/12/10

Review of “Greening Through IT: Information Technology for Environmental Sustainability,” T. Thurheimer, Journal of High Technology Law, 2010

Review of “Greening Through IT: Information Technology for Environmental Sustainability,” S. Patton, Choice: Current Reviews for Academic Libraries, Oct 2010

“Virtual Environmentalism,” S. Berinato, Technology Review, Nov/Dec 2010

“Green Bridge Over Troubled Media,” O. Ogunseitan, Journal of Industrial Ecology, 10/7/10

Review of “Greening Through IT: Information Technology for Environmental Sustainability,” A. Wilson, British Computer Society, August 2010

Review of “Greening Through IT: Information Technology for Environmental Sustainability,” R. Harle, Leonardo Reviews Online, 7/7/10

“Sustainability through computing,” N. Salafsky, Nature, 465, 425 (27 May 2010)

Interview, “Going Green With Technology”, Tech Therapy podcast, Host: S. Carlson and W. Arbogast, Chronicle of Higher Education, 3/11/10

“Attempt to End Patents on Genetic Tests Draws University Opposition,” P. Baskin, Chronicle of Higher Education, 2/28/10

“PatentSim Study Revisited: Patent Expertise Equalizes Innovation in Patent and Non-Patent Systems”, PatentDocs blog, 1/27/10

“Patent Simulation Study Indicates that Patent Protection May Not Encourage Innovation or Promote Societal Wealth”, PatentDocs blog, 1/6/10

Featured in: NSF 09-068, Report of the Advisory Committee for GPRA Performance Assessment FY 2009, <http://www.nsf.gov/pubs/2009/nsf09068/index.jsp>

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“Can a Computer Predict Innovation?” Damian Joseph, BusinessWeek.com, 7/29/09

“Finding Che Guevara’s ‘New Man,’” RichardFromHB, DailyKos blog, 7/29/09

“PatentSim’ Study Questions Link Between Patent System and Innovation,” T. Dutra, BNA Patent, Trademark & Copyright Journal, Vol. 78, No. 1924, 7/10/09

“Study says Patents Hurt Innovation,” D. Oshiro, ReadWriteWeb blog, 7/2/09

“New UCI website decodes political messages,” G. Robbins, OC Register ScienceDude blog, 9/3/08

“Study: Blog Reading Can Be Addictive,” J. Weisenthal, Washington Post and CBSNews.com, 4/16/08

“Habit-Forming Blogs: New Research Into Why People Read,” T. Weber, Wall Street Journal, Buzzwatch blog, 4/15/08

“Researchers peep into the bloggers’ world,” Economic Times, India, 4/10/08

“Beginning blog-ology,” A. Boyle, MSNBC.com Cosmic Log, 4/9/08

“Study: Blog readers are creatures of habit,” B. Gardiner, Wired.com GadgetLab blog, 4/9/08

“Blog reading becomes a habit, study says,” CBC News, 4/9/08

“Blogger Reader’s Online Habits Studied,” Dr. Dobbs, 4/9/08

“Two UCI scientists win prestigious Sloan Fellowships,” G. Robbins, OC Register ScienceDude blog, 2/17/08

“Friends – and strangers – take in evacuees,” V. Scher and M. K. Seff, LA Times, 10/25/07

“OC Lends helping hand to fire victims,” G. Hardesty, R. Srisavasdi and E. M. Torres, OC Register, 10/24/07

“Calit2 Looks Into the Games People Play,” ACM TechNews, 7/16/07

“Microsoft’s A.U.R.A. project - information at your fingertips,” R. Stewart, ZDNet.com 1/15/07

“Blog your groceries,” M. Ingram, globeandmail.com. 4/6/06. GreenScanner project also linked/blogged by: worldchanging.com, grist.org, researchbuzz.org, smartmobs.com, ecogeek.org, supervegan.com and numerous other sites.

“Innovators in O.C. Technology,” Orange County Register, 10/23/05

“Ecology research as good green fun,” T. Chuang, Orange County Register, 10/17/05

“Birds fly off the screen to teach ecology,” L. Pickoff-White, Washington Times, 6/14/05

“The Virtual Raft Project: Bridging the Virtual and Physical Worlds,” T. Ricker, 5/19/05  
<http://www.engadget.com/entry/1234000667043876>

“The State of Computer-Human Interaction,” Q. Norton, 4/14/05,  
<http://www.oreillynet.com/pub/a/network/2005/04/14/CHI2005.html>  
 “Running with the virtual wolves,” W. Hermann, The Arizona Republic, 9/20/04  
 “UCI Beall Ctr. Opens the Season with Virtual Wolf Exhibit,” Higher Learning, Nov/Dec ‘03  
 “Howl with the wolves,” T. Chuang, Orange County Register, 10/10/03  
 “The Intimate Machine,” Scientific American Frontiers, Host: Alan Alda, 10/22/02  
 “Pet Tech,” Scientific American Frontiers, Host: Alan Alda, 10/16/01  
 “Fresh Gear,” Tech TV, 9/22/01  
 “Dancing with virtual wolves,” A. Hermida, news.bbc.co.uk, 9/10/01  
 “Gadgetry Still Dazzles at Tech Conference, But Tech Slump Affects Turnout,” M. P. Grenier,  
 The Wall Street Journal, 8/22/01  
 “Where the Mona Lisa Meets the Motherboard,” G. Gaslin, LA Times, 8/17/01  
 “Computer Developers Aiming to Exterminate the Mouse,” A. Pham, LA Times, 8/14/01  
 “Feeling the virtual force in LA,” T. Logan, news.bbc.co.uk, 8/12/01  
 “Stretching it out at SIGGRAPH,” M. Stroud, www.wired.com, 8/11/01  
 “Exposure,” Sci-Fi Channel, Host: Lisa Marie, 4/28/01  
 “Banff Media Institute Living Architectures,” Leonardo Electronic Archive, Vol. 8, No. 12, 12/06/00  
 “Banff living architectures summit,” M. Locke, www.rhizome.org, 9/28/00  
 “Lights, Camera, Interaction,” D. P. Mahoney, Computer Graphics World, 4/00  
 “Sklave oder bester Freund?” W. Lackner, 3D Live, 4/00  
 “High Tech Entertainment,” CNN, 12/21/99  
 “Thinking’ game characters in development,” USA Today, 8/11/99  
 “MIT designs toys of tomorrow,” R. Sykes, www.cnn.com, 12/21/98  
 “Siggraph Exhibit Gets a Lot of Hits,” K. Kaplan, LA Times, 8/11/97

Updated:  
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