

Curriculum Vitae

Brian M. Scassellati

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Research Interests

My research focuses on building socially intelligent robots and on how these robots can be used to understand human social behavior. In recent years, this work has focused primarily on building socially assistive robots, that is, robots that provide social and cognitive support for education and therapy. Much of this work has focused on young children, including children with developmental disorders (especially autism spectrum disorder). My previous work has touched on areas of human-robot interaction, computational modeling of social development, humanoid robotics, and artificial intelligence.

Education

- May 2001 Ph.D., Computer Science, Massachusetts Institute of Technology
Dissertation: *Foundations for a Theory of Mind for a Humanoid Robot*
Committee: Rodney Brooks (chair), Leslie Pack Kaelbling, W. Eric L. Grimson
- May 1995 M.Eng., Computer Science and Electrical Engineering, Massachusetts Institute of Technology
- May 1995 Bachelor of Science, Computer Science, Massachusetts Institute of Technology
- May 1995 Bachelor of Science, Brain and Cognitive Science, Massachusetts Institute of Technology

Research Positions

- 8/19- A. Bartlett Giamatti Professor of Computer Science, Mechanical Engineering and Materials Science, Yale University
- 6/13-8/19 Professor, Department of Computer Science, Yale University
- 6/09-5/13 Associate Professor with tenure, Department of Computer Science, Yale University
- 6/06-5/09 Associate Professor on term, Department of Computer Science, Yale University
- 9/01-5/06 Assistant Professor, Department of Computer Science, Yale University
- 7/01-8/01 Postdoctoral Associate, MIT Artificial Intelligence Laboratory

Teaching

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| <i>CS 100: Introduction to Computing & Programming</i> | Fall 2015 | Yale University |
| <i>CS 201: Introduction to Computer Science</i> | Fall, 2005, 2006 | Yale University |
| <i>CS 472: Intelligent Robotics</i> | Spring 2015, Fall 2013,
Fall 2016, Spring 2018 | Yale University |
| <i>CS 473: Laboratory in Intelligent Robotics</i> | Spring 2002-2017, Fall 2019 | Yale University |
| <i>CS 470: Artificial Intelligence</i> | Fall 2002-3, 2009-10, 2012,
Spring 2019 | Yale University |
| <i>CS 673: Social Robotics</i> | Fall 2001 | Yale University |

Professional Activities

- Councilor, American Association for Artificial Intelligence, 2019-2022. (Elected member of. The governing board and chair of the AAAI External Communications Committee)
- Panelist, CCC Roadmap for Robotics Workshop, 2019
- Panelist, ONR Future Directions in Human-Machine Teaming Workshop, 2019
- Panelist, CCC Roadmap for Artificial Intelligence “Interaction” Workshop, 2019
- Panelist, CCC Roadmap for Artificial Intelligence “Robotics and Learning” Workshop, 2019
- Speaker, Yale Explores alumni event, Museum of Modern Art, San Francisco, March 12, 2019
- Chair, NSF Workshop on Embodied Conversational Agents and Human-Robot Interaction, 2018
- Whitney Humanities Fellow, 2018-2020
- Invited speaker, Penn State Ethics Forum, 2018
- Speaker, Yale Explores alumni event, Lincoln Center, New York, October 11, 2018
- Program Chair
 - 36th Annual Meeting of the Cognitive Science Society, 2014
 - 4th ACM/IEEE International Conference on Human-Robot Interaction, 2009
 - 7th IEEE International Conference on Development and Learning, 2008
 - 6th IEEE International Conference on Development and Learning, 2007
- Guest Editor, Inaugural Issue, Journal of Human-Robot Interaction, October, 2011
- Panelist, NSF International Assessment of Research and Development in Human-Robot Interaction – assessment of HRI research in China, Japan, and Korea in October, 2011
- Member, Steering Committee for the ACM/IEEE International Conference on Human-Robot Interaction 2012-2014
- Co-Organizer of the AI-HRI AAAI Fall Symposium Series. Washington, DC. November 12-14, 2015.
- Organizer, Robotics Systems and Science workshop on Human-Robot Interaction, held July 1 at USC
- Organizer, Center for Talented Youth (CTY) Science and Technology day for 250 gifted high school students and their families. March 28, 2010.
- Organizer, US/Japan workshop on Telepresence. Held Nov. 30-Dec 1, 2010 at Stanford.
- Organizer, US/Japan workshop on Human-Robot Interaction. Held January 5-6, 2010 at MIT.
- Member, DARPA Computer Science Futures II panel. Met 3 times in 2007-8 to advise DARPA on future "grand challenges" that would attract students to computer science.
- Member, Governing Board of the International Conference on Development and Learning (ICDL), 2008-2012
- Co-organizer of the ICRA 2008 workshop "Unifying Characteristics of Research in Human-Robot Interaction"
- Co-organizer of the Cognitive Science 2008 tutorial "Embodied Intelligence"
- Chairman, *Autonomous Mental Development Technical Committee*, IEEE Computational Intelligence Society (formerly Neural Networks Society). 2006-2007
- Faculty Guide, Graduate student invitational research workshop on human-robot interaction. One of six faculty members for an NSF-sponsored training workshop. Carmel, CA. August 3-5, 2006.
- Guest Editor, *International Journal of Humanoid Robotics*, special issue on Autonomous Mental Development, with John Weng and Zhengyou Zhang, Vol. 4(2), Spring 2007.
- Organized the panel session "The Future of HRI", 3rd ACM/IEEE International Conference on Human-Robot Interaction, 2007.
- Co-organizer of the special session “Autonomous mental development” at the IEEE World Congress on Computational Intelligence (WCCI-2006)

- 2001 Workshop Chair for the American Association of Artificial Intelligence (AAAI) Mobile Robot Workshop and Competition. Also served as the editor for a collection of papers from this workshop which was published by AAAI Press.
- 2001: Planning committee member for the MIT Initiative on Technology and Identity.
- 2001: Organizing committee member for AAAI Fall Symposium "Parallel Cognition for Embodied Agents".
- 1999-2000: Planning committee member for the MIT Museum exhibit on Artificial Intelligence.
- 1998-1999: Co-organizer for the seminar series "Brains and Machines" jointly hosted by the MIT Artificial Intelligence Laboratory and the MIT Center for Biological and Computational Learning.

Yale University Activities

- Advancement Committee for Engineering, ad-hoc member, 2017-2020
- Graduate School of Arts and Sciences Executive Committee, 2019-2020
- Franke Program in Science and the Humanities, Advisory Board, 2018-2020
- Whitney Humanities Fellow, 2018-2020
- Advisory Committee, Education Studies Program, 2016-2020
- Physical Sciences and Engineering Tenure and Promotions Committee, 2014-2018
- Executive Committee, Cognitive Science Program 2007-2018
- Acting Chair, Cognitive Science Program, Jan-Aug 2011
- Scholar Awards Committee, Yale University 2009-2013
- Graduate admissions committee, Department of Computer Science, 2002-2012
- Departmental computing committee, 2006-2008
- Coordinator for first year graduate students, Department of Computer Science, 2002-2005.
- Freshman Advisor, Morse College, 2001-2020

Honors and Awards

- 2020: Dylan Hixon '88 Prize for Teaching Excellence in the Natural Sciences, Yale University
- 2020: American Association for the Advancement of Science Leshner Leadership Fellow for Public Engagement with Science
- 2019: appointed as the A. Bartlett Giamatti Professor of Computer Science, Mechanical Engineering and Material Science
- 2019: Yale Science & Engineering Association Award for Meritorious Service to Yale University
- 2016: Best Student Paper Finalist, International Conference on Social Robotics (ICSR)
- 2016: Best Paper Nomination, Intelligent Virtual Agents (IVA)
- 2016: Best Paper Nomination, International Conference on Human Robot Interaction (HRI)
- 2014: One of three finalists for the 2014 RO-MAN Distinguished Interdisciplinary Research prize
- 2013: Society for Manufacturing Engineers, Top 10 Innovations to Watch
- 2012-13: Undergraduates from my lab were awarded 3 NSF graduate research fellowships, 2 NDSEG fellowships, a Fulbright Fellowship, and a CRA Undergraduate Research award
- 2012: Director of an NSF Expedition in Computing award for “Socially Assistive Robotics”, a 5-year \$10M project involving 17 investigators and 5 sites
- 2012: Our group was featured in a short film at the Los Angeles Film Festival, directed by Liz Garbus, as part of the GE Focus Forward collection
- 2011: A high school intern in my group placed 9th nationally in the Intel Science Talent Search
- 2010: Nomination for Best Paper Award, 5th ACM/IEEE International Conference on Human-Robot Interaction (HRI 2010)
- 2009: Higher Level Cognition Modeling Prize at the 2009 Cognitive Science Conference
- 2008: A. Richard Newton Breakthrough Research Award from Microsoft
- 2008: Keynote speaker, HRI Young Researchers Workshop, an NSF-sponsored tutorial at the 2008 ACM/IEEE International Conference on Human-Robot Interaction
- 2007: Alfred P. Sloan Research Fellowship
- 2007: Best Paper Award, 6th International Conference on Development and Learning (ICDL)
- 2006: Best Applied Computational Modeling Paper, 28th Annual Meeting of the Cognitive Science Society
- 2006: Guest speaker at the Annual Meeting of the National Academy of Sciences
- 2005: Keynote Speaker, 5th International workshop on Epigenetic Robotics
- 2004: Best Paper Award at the 3rd International Conference on Development and Learning (ICDL)
- 2004: Part of an NSF Science and Technology Center proposal that has entered the final phase of competition. From an initial field of more than 150 proposals, only 10 reached this final stage.
- 2003: NSF CAREER Award
- 2002: Selected as one of two nominees from Yale for the Packard Foundation Fellowship

- 2000: Best Paper Award at the First International IEEE/RSJ Conference on Humanoid Robotics
- 1995-8 National Defense Science and Engineering Graduate Fellowship
- 1995 Morris Joseph Levin Memorial Award for Best Oral Thesis Presentation
- 1994-5 Bose Foundation Fellowship
- 1993 Cray Research Scholarship
- Member of Phi Beta Kappa, Eta Kappa Nu, Tau Beta Pi, Sigma Xi

Invited talks

- Keynote, Endeavor Foundation meeting, Universidad de San Andres, Buenos Aires, Argentina, 11/11/19
- Franke Colloquium speaker, Yale University, 9/4/19
- Lecturer, Cheung Kong Graduate School of Business (CKGSB), Yale School of Management, 7/8/19
- Plenary speaker, ICAR-CNR workshop, Taormina, Italy, 6/18/19
- Visiting Colloquium Speaker, Okinawa Institute of Science and Technology, Okinawa, Japan 12/17/18
- NSF 10-Year Expedition in Computing Celebration, panelist, Washington DC, 12/10/18
- Keynote, Kuwait Foundation for the Advancement of Science, Symposium on “SuperIntelligence”, Kuwait City, 11/19/18
- NSF Workshop on Embodied Conversational Agents and Human-Robot Interaction, Denver, 10/20/18
- Yale Explores alumni event at Lincoln Center, New York, 9/13/18
- Yale Alumni Club of Cape Cod, Hyannis, MA, 9/12/18
- Yale Young African Scholars, Ghana, 8/12/18
- Keynote, Toward Advanced Robotic Systems (TAROS), Bristol, UK, 7/25/18
- Keynote, Applied Human Factors and Ergonomics (AHFE), Orlando, Florida, 7/23/18
- Keynote, Interaction Design for Children (IDC) workshop on Child-Robot Interaction, 6/18/18
- Computer Science colloquium, Oakland University, 6/15/18
- Grand Rounds, Yale Child Study Center, 5/18/18
- Keynote, Artificial Intelligence in Education Summit, New York City, 4/14/18
- Penn State Ethics Forum, 3/16/18
- Keynote, Workshop on Robots for Learning, Human-Robot Interaction (HRI 2018), 3/5/18
- University of Texas, Arlington – CS Colloquium, 12/13/17
- New Canaan Public Library, 12/6/17
- Spectrum News Webinar, an online news resource for the autism community, 11/29/17
- Cornell – Human-Robot Interaction Public Forum, 11/16/17
- AAI Fall Symposium keynote on 11/10/17
- Yale Parent Leadership Council, 11/4/17
- Data Science Colloquium, Yale, 10/20/17
- Workshop on Autonomy, Robotics and Cognition, UMD, 10/3/17
- National Student Leadership Conference, Yale University, 8/31/17
- Applied Physics Lab at Johns Hopkins, Research Colloquium, 8/3/17
- Organized session keynote, 8th International Conference for Applied Human Factors and Ergonomics (AHFE 2017), Los Angeles, 7/19/17
- Keynote, Workshop on Child-Robot Interaction, Robotics Systems and Science (RSS), Boston, 7/15/17
- Keynote, Workshop on Human-Centered Robotics, Robotics Systems and Science (RSS), Boston, 7/15/17
- Yale Young Global Scholars, Yale University, 7/11/17
- George Washington University, CS Colloquium, 5/1/17
- Branford Public Library, Science Saturdays, 4/2/17
- Computer Science and Artificial Intelligence Laboratory, MIT, 3/21/17
- Simons Foundation workshop on Interactive Learning, UC Berkeley, 2/27/17
- University of Missouri, Rolla, Distinguished Speaker, 50th Anniversary Jubilee, 2/6/17
- Ethics of Emerging Technologies Workshop, UCSD, 11/11/16.
- **Keynote**, 8th International Conference on Social Robotics, 11/3/16
- Institute for Creative Technologies, University of Southern California, New Directions in the Psychology of Technology Research Conference, 10/22/16
- University of Pennsylvania, UPENN Humanities Forum on Translation, 10/19/16

- **Keynote**, Workshop on "Behavior Adaptation, Interaction and Learning for Assistive Robotics" (BAILAR), IEEE Ro-MAN conference, NYC, 8/28/16
- **Keynote**, Workshop on "Groups in HRI", IEEE Ro-MAN conference, NYC, 8/28/16
- NSF-NIH Workshop on Pediatric Rehabilitation, NIH, 8/9/16
- Università Degli Studi, Palermo, Italy, Trust and Influence in Human-Machine Teaming Workshop, 7/13/16
- Yale Haskins Laboratory (staff talk), 6/2/16
- Ben Gurion University, Beersheba, Israel, Sensing for Robotics Workshop, 5/30/16
- **Keynote**, International Conference on Infant Studies, New Orleans, LA, 5/28/16
- **Keynote**, 2nd Annual Yale Technology Summit, 10/30/15
- University of Washington, Human-Robot Interaction symposium, 11/20/14.
- NSF Smart Services Workshop, Cambridge, MA, 11/19/14.
- **Keynote**, AAAI Fall Symposium on AI in Human-Robot Interaction, 11/13/14.
- Georgia Tech, Joint Expedition Meeting, 11/10/14.
- Atlanta Autism Consortium, Atlanta Academy of Medicine, 11/10/14.
- NSF Computational Social Interaction workshop, University of Arizona, 11/7/14.
- University of Southern California, Computer Science Colloquium, 10/29/14.
- Williams College, Computer Science Colloquium, 9/26/14.
- **Session Keynote**, International Conference on Intelligent Robots and Systems (IROS 2015), 9/16/14.
- **Keynote**, Workshop on Assistive Robotics for Individuals with Disabilities, IROS 2015, 9/14/14.
- Cognitive Science Society, Panel on The Future of Human-Agent Interaction, 7/26/14.
- NSF/CRA Computing Innovation Fellows workshop, invited panel on mentoring, 5/22/14.
- Yale, Computer Science Colloquium, 4/3/14.
- Google, Cambridge Office, Technology Talk, 4/1/14.
- U Memphis, Computer Science Colloquium, 3/21/14.
- Villanova University, Cognitive Science Colloquium, 3/11/14.
- **Keynote**, Workshop on Bridging HRI and Neuroscience, HRI 2014, 3/2/14.
- **Keynote**, NRL Karles Invitational Conference, 1/14/14.
- **Keynote**, US Agency for International Development and the Inter-American Development Bank, "Demand Solutions" Conference, Washington, DC, 11/21/13.
- NSF Signing Creatures Workshop, Gallaudet University, 11/15/13.
- Brown University, Cognitive Science Colloquium, 10/23/13.
- Yale Science Saturdays (outreach program), 10/12/13.
- Yale, Cognitive Science Seminar Series, 10/2/13.
- Japanese National Institute of Informatics Shonan Meeting on Computational Behavioral Science, Tokyo, Japan, 9/27/13.
- University of Delaware, Cognitive Science Colloquium, 9/19/13.
- Yale Developmental Psychology seminar series, 9/4/13.
- **Keynote**, International Summer School on Social HRI, Christ's College, Cambridge, England, 8/26/13.
- Olin College, Computer Science Colloquium, 4/23/13.
- **Keynote Speaker**, Trinity College Fire Fighting Robot Contest, 4/6/13.
- Worcester Polytechnic Institute, Robotics Engineering Program, Colloquium, 4/2/13.
- Columbia University, Department of Computer Science, Humanoid Robotics course guest lecture, 11/7/12.

- Vanderbilt University, NSF workshop on Agency, 8/8/12.
- Workshop on Developmental Robotics, International Conference on Infant Studies (ICIS), 6/6/12.
- Washington University of St. Louis, Computer Science Colloquium, 3/30/12.
- University of Pennsylvania, Institute for Research in Cognitive Science Colloquium, 3/16/12.
- Indiana University, Cognitive Science Colloquium, 2/6/12.
- Cornell University, Department of Psychology, Colloquium, 9/9/11.
- **Keynote Speaker**, Workshop on Human-Robot Interaction: Perspectives and contributions to robotics from the human sciences, part of the 2011 Robotics Science and Systems conference, 6/31/11.
- Yale Reunions, 5/29/11.
- Face to Face, Brain to Brain: Exploring the Mechanisms of Dyadic Social Interactions, a workshop sponsored by the Princeton Department of Psychology, 5/6/11.
- **Keynote Speaker**, Robot-Doc doctoral training consortium meeting, a Marie Curie Initial Training Network (ITN) funded by the European Union. Budapest, 5/2/11.
- Yale Science and Engineering Forum, 4/26/11.
- Panelist, Relationships with Robotic Others: Developmental Perspectives, a panel at the Annual Meeting of the Society for Research in Child Development (SRCD), 3/31/11.
- **Keynote Speaker**, HRI Workshop on Telepresence at the 2011 ACM/IEEE International Conference on Human-Robot Interaction, 3/4/11.
- Yale Technology and Ethics Working Group, 1/20/10.
- US/Japan Workshop on Human-Robot Interaction, Boston, 1/05/10.
- Carnegie Mellon University, Robotics Institute Colloquium, 11/6/09.
- Yale Bio-Ethics summer program, 6/24/09.
- Cornell University, commentator for the symposium "Babies in the Wild", 4/26/09.
- Northwestern University, Center for Technology and Social Behavior colloquium, 3/5/09.
- Brigham Young University, Computer Science colloquium, 11/07/08.
- Barcelona Cognition, Brain and Technology summer school, funded by euCognition, 9/9/08.
- Cognitive Science 2008 workshop, *Embodied Cognition and Robotics*, 7/23/08.
- Child Study Center Associates dinner, Yale Club, New York City, 5/29/08.
- ICRA 2008 workshop, Social Interaction with Intelligent Indoor Robots, 5/20/08.
- Georgia Institute of Technology, *Robotics and Intelligent Machines* (RIM) seminar series, 4/23/08.
- **Keynote speaker**, Social Robotics Workshop, hosted jointly by the Schenectady Museum and RPI, sponsored by an NSF CISE CPATH grant, 3/20/08.
- **Keynote speaker**, HRI Young Researchers Workshop, an NSF-sponsored tutorial at the 2008 *ACM/IEEE International Conference on Human-Robot Interaction*, 3/12/08.
- Tufts University, computer science colloquium, 2/14/08.
- Rensselaer Polytechnic Institute (RPI), computer science colloquium, 11/08/07.
- IROS 2007 workshop, Assistive Technologies: Rehabilitation and Assistive Robotics, 10/29/07.
- Wesleyan University, computer science colloquium, 10/23/07.
- Gadgetoff (an invitation-only technology summit), 09/28/07.
- Society for Research in Child Development (SRCD) Biennial Meeting, 3/30/07.
- **Keynote speaker**, AAAI Spring Symposium on Multidisciplinary Collaboration for Socially Assistive Robotics, 03/27/07.
- Harvard University, Electrical Engineering Seminar series, 03/16/07.
- University of Missouri, CS Departmental Seminar, 02/27/07.
- Chicago Humanities Festival, 11/11/06.
- Robotics: Systems and Science workshop, *Socially Assistive Robotics*. 8/19/06.

- University of Massachusetts Lowell, CS Departmental seminar, 4/19/06.
- National Academy of Sciences, Annual Meeting, 4/24/06.
- Massachusetts Institute of Technology, CSAIL Robotics Seminar, 11/29/05
- Doing Likewise: A Day-Long Symposium exploring issues surrounding imitation, emulation and mimesis presented by the New York Institute for the Humanities at NYU, and moderated by Jonathan Miller, 11/19/05
- Carnegie Mellon University, Robotics Institute Colloquium, 11/11/05
- **National Academy of Sciences** Frontiers of Science Symposium, 10/26/05. (This was one of three talks in a session on robot learning. This session was selected out of all others for presentation t the Annual meeting on 4/24/06).
- Psychology Lunch, Department of Psychology, Yale University, 9/7/05
- **Keynote Speaker**, 5th International workshop on Epigenetic Robotics, 7/23/05
- Yale Systems Science Seminar Series, 2/11/05
- Central Connecticut University Computer Science Seminar Series, 2/9/05
- International Conference on Infant Studies (ICIS), 5/5/2004
- Yale High Performance Computing Initiative, 4/30/2004
- Washington University, Computer Science Colloquium, 4/9/2004
- Lecture and laboratory tour as part of the International Festival of Arts and Ideas. Approximately 120 people toured the Social Robotics lab in AK Watson Hall during this event. 06/2003
- NSF Neuromorphic Engineering Conference, Telluride, Colorado, 07/17/2003.
- International Joint Conference on Neural Networks (invited), 07/15/2003.
- Artificial Intelligence and Trans-humanism working group, Yale Bioethics project, 09/12/03.
- Yale-New Haven Community open house. Lecture accompanied by a lab tour that was open to the public. Approximately 150 people toured our laboratory in AK Watson during this event. 11/08/2003.
- Cognitive Science Colloquium, Southern Illinois University, Carbondale, 11/15/02.
- The festival Le Reve de Vaucanson (The Dream of Vaucanson), Musee de Arts et Metries, Paris, 10/17/02.
- 2nd workshop on Robotic and Virtual Interactive systems in the Therapy of Autism and other psychopathological disorders, Hopital La Salpetriere, Paris, 9/27/02.
- Morse College Fellows meeting, 9/23/02.
- Yale Alumni weekend, 6/02/02.
- Pierce Laboratory weekly seminar, Yale School of Medicine, 5/20/02.
- Yale Entrepreneurial Society Panel Discussion, 4/19/02.
- Artificial Intelligence and Transhumanism working group, Yale Bioethics project, 2/11/02.
- Psychology Lunch, Department of Psychology, Yale University, 1/23/02.
- Fourteenth Annual Government Technology Conference in Albany, NY, 11/01.
- Plenary talk at "Computation for Metaphors, Analogy and Agents" workshop at the University of Aizu, Aizu-Wakamatsu, Japan. 6/98.

Funding Workshop Participation

- NSF/ JST US-Japan Robotics Workshop on Safety, Security, and Society, San Francisco, CA, 08/15/08 (invited participant)
- CCC / CRA Roadmap for Robotics Workshop: A Research Roadmap for Medical and Healthcare Robotics, Washington, DC, 07/15/08 (invited participant)
- ONR workshop on Social Robotics, Boston, MA, 2/29/08 (speaker)
- NSF Workshop on Physical Robot Appearance and Design for Next Generation Human-Robot Interaction Systems, University of Southern California, 11/16/05 (speaker)

- United States Army Logistics Transformation Agency, Telerobotics and Energy Conference, Washington, DC, 8/11/2004 (speaker)
- DARPA Human-Machine Interface workshop, San Luis Obispo, California, 9/01 (speaker)
- Japanese Ministry of Science and Technology workshop on development and cognition of humans and artifacts in Kyoto, Japan, 10/01 (speaker)
- NSF/DARPA Workshop on Development and Learning, Michigan State University, Lansing, MI, 9/2000 (speaker)

Guest lectures

- Yale ASTR 150, *Origins and the Search for Life in the Universe*, Spring 2018
- Yale EDST 110, *Foundations in Education Studies*, Spring 2017
- Yale CogSci 110, *Introduction to Cognitive Science*, Fall 2001-2018
- Yale CS 671, *Advanced Artificial Intelligence*, November 2009
- Yale CS 470, *Artificial Intelligence*, October, 2001

Publications

Refereed Journal Publications

- J31) Traeger, M. L., Sebo, S. S., Jung, M., Scassellati, B., & Christakis, N. A. (2020). Vulnerable robots positively shape human conversational dynamics in a human–robot team. *Proceedings of the National Academy of Sciences*, 117(12), 6370-6375.
- J30) Ramachandran, A., Huang, C. M., & Scassellati, B. (2019). Toward Effective Robot–Child Tutoring: Internal Motivation, Behavioral Intervention, and Learning Outcomes. *ACM Transactions on Interactive Intelligent Systems (TiiS)*, 9(1), 1-23.
- J29) D. Leyzberg, A. Ramachandran, & B. Scassellati. The Effect of Personalization in Longer-Term Robot Tutoring. *ACM Trans. Human-Robot Interaction*. 7, 3, Article 19 (December 2018), 19 pages.
- J28) B. Scassellati, L. Boccanfuso, C. M. Huang, M. Mademtzi, M. Qin, N. Salomons, ... & F. Shic. Improving social skills in children with ASD using a long-term, in-home social robot. *Science Robotics*, 3(21), eaat7544 (2018).
- J27) T. Belpaeme, J. Kennedy, A. Ramachandran, B. Scassellati, & F. Tanaka. Social robots for education: A review. *Science Robotics*, 3(21), eaat5954 (2018).
- J26) G. Yang, J. Bellingham, P.E. DuPont, P. Fischer, L. Floridi, R. Full, N. Jacobstein, V. Kumar, M. McNutt, R. Merrifield, B.J. Nelson, B. Scassellati, M. Taddeo, R. Taylor, M. Veloso, Z. Lin Wang, & R. Wood. The grand challenges of Science Robotics. *Science Robotics*, Vol. 3, Issue 14 (31 January 2018)
- J25) I. Leite, M. McCoy, M. Lohani, D. Ullman, N. Salomons, C. Stokes, S. Rivers & B. Scassellati. Affective Narratives with Robots: The Impact of Interaction Context and Individual Differences on Story Recall and Emotional Understanding. *Frontiers in Robotics and Artificial Intelligence*, Vol 4, Article 29. July 2017.
- J24) H. Admoni & B. Scassellati. Social Eye Gaze in Human-Robot Interaction: A Review. *International Journal of Humanoid Robotics*, Vol 6, No 1, p. 25-63. May 2017.
- J23) A. Castro-González, H. Admoni, & B. Scassellati. Effects of form and motion on judgments of social robots' animacy, likability, trustworthiness and unpleasantness. *International Journal Human-Computer Studies*, 90 (2016), p. 27-38.
- J22) S. Rabbitt, A. Kazdin & B. Scassellati. Integrating Socially Assistive Robotics into Mental Healthcare Interventions: Applications and Recommendations for Expanded Use. *Clinical Psychology Review*, Vol. 35, p. 35–46. February 2015.
- J21) E. S. Kim, L. D. Berkovits, E. P. Bernier, D. Leyzberg, F. Shic, R. Paul, & B. Scassellati. Social Robots as Embedded Reinforcers of Social Behavior in Children with Autism. *Journal of Autism and Developmental Disorders*, Vol. 43, Issue 5, p. 1038-1049, May 2013. DOI 10.1007/s10803-012-1645-2.
- J20) B. Scassellati, H. Admoni & M. Mataric. Robots for Use in Autism Research. *Annual Review of Biomedical Engineering*, Vol. 14, p. 275–294, 2012.
- J19) E. Kim, R. Paul, F. Shic & B. Scassellati. Bridging the research gap: Making HRI useful to individuals with autism. *International Journal of Human-Robot Interaction*, Vol. 1, No. 1, 2012.
- J18) F. Shic, J. Bradshaw, A. Klin, B. Scassellati, & K. Chawarska. Limited Activity Monitoring in Toddlers with Autism Spectrum Disorder. *Brain Research*. DOI: 10.1016/j.brainres.2010.11.074
- J17) W. Bainbridge, J. Hart, E. Kim & B. Scassellati. The Benefits of Interactions with Physically Present Robots over Video-displayed Agents. *International Journal of Social Robotics*. Vol 3(1), p. 41-52. 2010. DOI: 10.1007/s12369-010-0082-7

- J16) C. Crick and B. Scassellati. Controlling a Robot with Intention Derived from Motion. *Topics in Cognitive Science*. Vol 2 (1), p. 114-126. Jan 2010.
- J15) J. McClelland, J. Weng, G. Deak, & B. Scassellati. Cognitive Science Meets Autonomous Mental Development. *Cognitive Science*. Vol 34 (3), p. 533-4, April 2010. DOI: 10.1111/j.1551-6709.2010.01097.x
- J14) K. Gold and B. Scassellati. Using Probabilistic Reasoning Over Time to Self-Recognize. *Robotics and Autonomous Systems (RAS)* 57(4), p. 384-392, 2009.
- J13) K. Gold, M. Doniec, C. Crick, and B. Scassellati. Robotic Vocabulary Building Using Extension Inference and Implicit Contrast. *Artificial Intelligence Journal*. Vol. 173(1), p. 145-166. 2009.
- J12) F. Shic & B. Scassellati. Pitfalls in the modeling of developmental systems. *International Journal of Humanoid Robotics*, Vol. 4(2), p. 435-454. 2007.
- J11) A. Tapus, M. Mataric, & B. Scassellati. The grand challenges in socially assistive robotics. *IEEE Robotics and Automation Magazine*. Vol. 4, No. 1. p. 35-42, March 2007.
- J10) F. Shic & B. Scassellati. A behavioral analysis of computational models of visual attention. *International Journal of Computer Vision*, Vol. 73(2), p. 159-177, 2007.
- J9) K. Gold & B. Scassellati. Learning acceptable windows of contingency. *Connection Science, special issue on developmental learning*, Vol. 18(2), p. 217-228, June 2006.
- J8) C. Crick, K. Gold, E. Kim, F. Shic, G. Sun & B. Scassellati. Social Development. *IEEE Computational Intelligence Magazine*, Vol. 1(3), p. 41-47, August 2006.
- J7) G. Sun & B. Scassellati. A fast and efficient model for learning to reach. *International Journal of Humanoid Robotics*, Vol. 2, No. 4, p.391-413, 2005.
- J6) C. Breazeal & B. Scassellati. Robots that imitate humans. *Trends in Cognitive Science*, vol. 6, pp. 481-487, 2002.
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- C22) K. Gold & B. Scassellati. Using context and sensory data to learn first and second person pronouns. *1st Annual Conference on Human-Robot Interaction (HRI-06)*. Salt Lake City, Utah. 2006.
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- C20) B. Scassellati. Using robots to study abnormal social development. *Fifth International Workshop on Epigenetic Robotics (EpiRob)*. Nara, Japan. July 2005.
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- C18) B. Scassellati. Quantitative metrics of social response for autism diagnosis, *14th International Workshop on Robot and Human Interactive Communication (ROMAN)*. Nashville, TN. Aug. 2005.
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- C13) A. Lovett & B. Scassellati. Using a robot to reexamine looking time experiments. *4th International Conference on Development and Learning (ICDL)*. San Diego, CA. Aug. 2004. **BEST PAPER AWARD.**
- C12) P. Michel, K. Gold & B. Scassellati. Robotic self-recognition. *2004 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*. Sendai, Japan. Sept. 2004.
- C11) A. Robinson-Mosher & B. Scassellati. Prosody recognition in male infant-directed speech. *2004 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*. Sendai, Japan. Sept. 2004.
- C10) B. Scassellati. Investigating models of social development using a humanoid robot. *2003 International Joint Conference on Neural Networks (IJCNN)*. Portland, OR. July 2003.
- C9) B. Scassellati. Theory of mind for a humanoid robot. *1st IEEE/RSJ International Conference on Humanoid Robotics (Humanoids 2000)*. Cambridge, MA. Sept. 2000. **BEST PAPER AWARD.**
- C8) C. Breazeal, A. Edsinger, P. Fitzpatrick, B. Scassellati & P. Varchavskaya. Social constraints on animate vision. *1st IEEE/RSJ International Conference on Humanoid Robotics (Humanoids 2000)*. Cambridge, MA. Sept. 2000.
- C7) C. Breazeal & B. Scassellati. How to build robots that make friends and influence people. *1999 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS-99)*. Kyongju, Korea. Aug. 1999.
- C6) C. Breazeal & B. Scassellati. A context-dependent attention system for a social robot. *1999 International Joint Conference on Artificial Intelligence (IJCAI-99)*, Stockholm, Sweden. July 1999.

- C5) B. Scassellati. Knowing what to imitate and knowing when you succeed. Annual meeting of the Society for the Study of Artificial Intelligence and Simulation of Behaviour (AISB). Edinburgh, Scotland. June 1999.
- C4) R. Brooks, C. Breazeal, R. Irie, C. C. Kemp, M. Marjanovic, B. Scassellati & M. Williamson. Alternate essences of intelligence. *15th National Conference on Artificial Intelligence (AAAI-98)*. Madison, WI. Aug. 1998.
- C3) B. Scassellati. Eye finding via face detection for a foveated, active vision system. *15th National Conference on Artificial Intelligence (AAAI-98)*. Madison, WI. Aug. 1998.
- C2) M. Marjanovic, B. Scassellati & M. Williamson. Self-taught visually-guided pointing for a humanoid robot, with. *4th International Conference on Simulation of Adaptive Behavior (SAB-96)*, Cape Cod, MA. June 1996.
- C1) B. Scassellati, S. Alexopoulos & M. Flickner. Retrieving images by 2D shape: a comparison of computation methods with perceptual judgments, with. In *Storage and Retrieval for Image and Video Databases II*, SPIE Conference Proceedings, Volume 2185, San Jose, CA, pp. 2-14, 1994.

Refereed Workshop Proceedings

- W26) S. Strohkorb & B. Scassellati. Cultivating Psychological Safety in Human-Robot Teams with Social Robots. *Robots in Groups and Teams Workshop at the 20th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2017)*. Portland, OR, USA, February 25 - March 1, 2017.
- W25) A. Ramachandran and B. Scassellati. Long-term Child-Robot Tutoring Interactions: Lessons Learned. *Long-Term Child-Robot Interaction (LTCRI) Workshop at IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN)*. New York, New York, USA, August 27, 2016.
- W24) S. Strohkorb, C.M. Huang, A. Ramachandran, and B. Scassellati. Establishing Sustained, Supportive Human-Robot Relationships: Building Blocks and Open Challenges. *AAAI Spring Symposium Series: Enabling Research in Socially Intelligent Human-Robot Interaction: A Community-Driven Modular Research Platform*. Palo Alto, CA, USA. March 21-23, 2016.
- W23) E.C. Grigore and B. Scassellati. Constructing Policies for Supportive Behaviors and Communicative Actions in Human-Robot Teaming. In: *Proceedings of the HRI Pioneers Workshop at the 11th ACM/IEEE International Conference on Human-Robot Interaction (HRI) 2016*, March 7 – 10, 2016.
- W22) A. Ramachandran & B. Scassellati. Developing Adaptive Social Robot Tutors for Children. In: *Proceedings of the AAAI Fall Symposium on Artificial Intelligence and Human-Robot Interaction (AI-HRI 2015)*. Arlington, Virginia, USA, November 13-15, 2015.
- W21) B. Hayes, M. Gombolay, M. Jung, K. Hindriks, J. de Greeff, C. Jonker, M. Neerincx, J. Bradshaw, M. Johnson, I. Kruijff-Korbayova, M. Sierhuis, J. Shah, B. Scassellati. HRI Workshop on Human-Robot Teaming. In *Proceedings of the Tenth Annual ACM/IEEE International Conference on Human-Robot Interaction Extended Abstracts*. Portland, Oregon, March 2-5, 2015.
- W20) A. Ramachandran & B. Scassellati (2015). Fostering Learning Gains Through Personalized Robot-Child Tutoring Interactions. In: *Proceedings of the HRI Pioneers Workshop at the Tenth ACM/IEEE Conference on Human-Robot Interaction (HRI 2015)*. Portland, Oregon, USA, March 2.
- W19) K.M. Tsui (2015). Lessons Learned: Towards Informal Science Education of Human-Robot Interaction at Children’s Science Museums. *ACM/IEEE International Conference on Human-Robot Interaction, Workshop on “HRI Education: How to design and teach courses in Human-Robot Interaction.”*Portland, OR. March 2, 2015.
- W18) Q. Wang, K. Chawarska, S. W. Zucker, B. Scassellati, and F. Shic. Dimensionality of Gaze Patterns Towards Faces and Objects in Toddlers with ASD. *2014 International Meeting for Autism Research (IMFAR 2014)*. Atlanta, Georgia, US, May 2014.

- W17) H. Admoni and B. Scassellati. Nonverbal Behavior Modeling for Socially Assistive Robots. In *AAAI Fall Symposium Series: Artificial Intelligence and Human-Robot Interaction (AI-HRI)*. Arlington, VA, USA. November 13-15, 2014.
- W16) B. Hayes and B. Scassellati. Developing Effective Robot Teammates for Human-Robot Collaboration. In Proceedings of the “Artificial Intelligence and Human-Robot Interaction” (AI-HRI) Fall Symposium. Arlington, Virginia USA, November 13-15, 2014.
- W15) H. Admoni and B. Scassellati. Roles of Robots in Socially Assistive Applications. *Proceedings of the IROS 2014 Workshop on Rehabilitation and Assistive Robotics*. Chicago, IL, USA, September 18, 2014.
- W14) A. Litoiu & B.Scassellati. Personalized Instruction of Physical Skills with a Social Robot. *Proceedings of the “Machine Learning for Interactive Systems” (MLIS) Workshop at AAAI 2014*. Quebec City, Canada, July 28, 2014.
- W13) A. Ramachandran & B. Scassellati. Adapting Difficulty Levels in Personalized Robot-Child Tutoring Interactions. *Proceedings of the “Machine Learning for Interactive Systems” (MLIS) Workshop at AAAI 2014*. Quebec City, Canada, July 28, 2014.
- W12) B. Hayes and B.Scassellati. Online Development of Assistive Robot Behaviors for Collaborative Manipulation and Human-Robot Teamwork. In *Proceedings of the “Machine Learning for Interactive Systems” (MLIS) Workshop at AAAI 2014*. Quebec City, Canada, July 27, 2014.
- W11) B. Hayes and B. Scassellati. Challenges in Shared-Environment Human-Robot Collaboration. In *Proceedings of the Collaborative Manipulation Workshop at the ACM/IEEE International Conference on Human-Robot Interaction (HRI 2013)*. Tokyo, Japan, March 2013.
- W10) B. Hayes and B. Scassellati. Social Hierarchical Learning. In: Proceedings of the “HRI Pioneers” Workshop at HRI 2013. Tokyo, Japan, March 3, 2013.
- W9) H. Admoni & B. Scassellati. Robot Gaze is Different From Human Gaze: Evidence that robot gaze does not cue reflexive attention. In *Proceedings of the "Gaze in Human-Robot Interaction" Workshop at HRI 2012*.
- W8) J. W. Hart & B. Scassellati. Robotic Self-Models Inspired by Human Development. In *Proceedings of the AAAI-10 Workshop on Metacognition for Robust Social Systems*. Atlanta, Georgia, July 11, 2010.
- W7) J. Hart, B. Scassellati & S. Zucker. Epipolar geometry for humanoid robotic heads. *4th International Cognitive Vision Workshop (ICVW 2008)*. Santorini, Greece, 2008.
- W6) K.Gold & B. Scassellati. Learning about the self and others through contingency. *2005 AAAI Spring Symposium “Developmental Robotics.”* Stanford, CA. Mar. 2005.
- W5) B. Scassellati. How robotics and developmental psychology complement each other. *NSF/DARPA Workshop on Development and Learning*. Michigan State University, Lansing, MI. June 2000.
- W4) B. Scassellati. Investigating models of social development using a humanoid robot. *1998 AAAI Fall Symposium “Robots and Biology: Developing Connections.”* Orlando, FL. Oct. 1998.
- W3) B. Scassellati. Imitation and mechanisms of shared attention: A developmental structure for building social skills. *Autonomous Agents 1998 workshop “Agents in Interaction - Acquiring Competence through Imitation*. Minneapolis, MO. Aug. 1998.
- W2) B. Scassellati. Building behaviors developmentally: A new formalism. *1998 AAAI Spring Symposium “Integrating Robotics Research”*. Stanford, CA. Mar. 1998.
- W1) B. Scassellati. Mechanisms of shared attention for a humanoid robot. *1996 AAAI Fall Symposium “Embodied Intelligence.”* Cambridge, MA. Oct. 1996.

Refereed Book Chapters

- B8) B. Scassellati. The Cog Project. In A. Goswami and P. Vadakkepat, eds., *Humanoid Robotics: A Reference*, Springer International Publishing, 2016.
- B7) M.J. Matarić and B. Scassellati. Socially Assistive Robotics. In B. Siciliano and O. Khatib, eds., *Second Edition of the Springer Handbook of Robotics*, Chapter 73, Springer International Publishing Switzerland, 2016.
- B6) B. Scassellati & K. Tsui. Co-Robots: Humans and Robots Operating as Partners. In W. Bainbridge and M. Roco, eds., *Handbook of Science and Technology Convergence*, Springer International Publishing Switzerland, 2015.
- B5) J. Hart & B. Scassellati. Robotic Models of Self. In M. Cox and R. Raja, eds., *Metareasoning*, MIT Press, 2011.
- B4) C. Breazeal & B. Scassellati. Challenges in building robots that imitate people. In K. Dautenhahn and C. Nehaniv, eds., *Imitation in Animals and Artifacts*, MIT Press, 2002.
- B3) B. Scassellati. Investigating models of social development using a humanoid robot. In B. Webb and T. Consi, eds., *Biorobotics*, MIT Press, 2001.
- B2) R. Brooks, C. Breazeal, M. Marjanovic, B. Scassellati & M. Williamson. The Cog Project: Building a humanoid robot. In C. Nehaniv, ed., *Computation for Metaphors, Analogy and Agents, Vol. 1562 of Springer Lecture Notes in Artificial Intelligence*, Springer-Verlag, p. 52-87, 1998.
- B1) B. Scassellati. Imitation and mechanisms of joint attention: A developmental structure for building social skills on a humanoid robot. In C. Nehaniv, ed., *Computation for Metaphors, Analogy and Agents, Vol. 1562 of Springer Lecture Notes in Artificial Intelligence*, Springer-Verlag, p. 176-195, 1998.

Technical Reports

- T3) B. Scassellati. Foundations of a theory of mind for a humanoid robot. Ph.D. dissertation, MIT Department of Computer Science and Electrical Engineering. May, 2001.
- T2) B. Scassellati. A binocular, foveated, active vision system. MIT AI Memo 1628, March 1998.
- T1) B. Scassellati. High-level perceptual contours from a variety of low-level physical features. Master's Thesis, MIT. 1995.

Student Supervision

Graduated Ph.D. students

1. Elena Corina Grigore. *Learning Supportive Behaviors for Adaptive Robots in Human-Robot Collaboration*. Defended on 8/28/18.
2. Aditi Ramachandran. *Building Effective Robot Tutoring Interactions for Children*. Defended on 8/6/18.
3. Ahsan Nawroj. *Modular Active-Cell Robots (MACRO): A Framework for Designing Shape-changing Structures*. Defended on 7/17/17. (Mechanical Engineering)
4. Henny Admoni. *Nonverbal Communication in Socially Assistive Human-Robot Interaction*. Defended on 11/23/15. Most recent position: assistant professor, Robotics Institute, Carnegie Mellon University.
5. Bradley Hayes. *Supportive Behaviors for Human-Robot Teaming*. Defended on 9/24/15. Most recent position: assistant professor, University of Colorado Boulder Engineering and Applied Science.
6. Justin Hart. *Robotic Models of Self*. Defended on 9/3/14. Most recent position: Clinical Assistant Professor, University of Texas Austin.
7. Dan Leyzberg. *Creating Personalized Robot Tutors That Adapt to The Needs of Individual Students*. Defended on 8/14/14. Most recent position: Lecturer, Princeton University.
8. Elizabeth Kim. *Robots for social skills therapy in autism: evidence, systems, and designs toward clinical utility*. Defended on 8/21/13. Most recent position: Post-doctoral associate, Children's Hospital of Pennsylvania, University of Pennsylvania.
9. Christopher Crick. *Inferring Social Roles and Intention from Motion and Interaction*. Defended on 9/23/09. Most recent position: assistant professor, Oklahoma State University.
10. Fred Shic. *Computational Methods for Eye-Tracking Analysis: with Applications to Autism*. Defended on 8/20/2008. Most recent position: Associate professor, Department of Pediatrics, University of Washington.
11. Kevin Gold. *Using Sentence Context and Implicit Contrast to Learn Sensor-Grounded Meanings for Relational and Deictic Words: The TWIG System*. Defended on 3/7/08. Most recent position: Lecturer, Northeastern.
12. Ganghua Sun. *From Motor Learning to Social Learning: A Study of Development on a Humanoid Robot*. Degree awarded in December, 2006. Most recent position: Vice President, Goldman Sachs.

Former Post-docs

1. Alessandro Roncone, Postdoctoral Associate, 2015-2018. Most recent position: assistant professor, University of Colorado Boulder.
2. Olivier Mangin. Postdoctoral Associate, 2015-2018. Most recent position: Research Engineer, Bosch USA.
3. Chien-Ming Huang, Postdoctoral Associate, 2015-2017. Most recent position: assistant professor, Johns Hopkins University
4. Laura Boccanfuso, Postdoctoral Associate, 2014-2016. Most recent position: founder & CEO, Vän Robotics, LLC

5. Katherine Tsui, Postdoctoral Associate, 2015-2016. Most recent position: user experience researcher, Toyota Research Institute
6. Iolanda Leite, Postdoctoral Associate, 2013-2015. Most recent position: assistant professor, Department of Robotics, Perception and Learning at the Royal Institute of Technology (KTH), Stockholm, Sweden
7. André Pereira. Postdoctoral Associate, 2014-2015. Most recent position: senior research associate, Disney Research Pittsburgh.
8. Álvaro Castro-González. Visiting post-doc, Fall 2013. Most recent position: assistant professor, Universidad Carlos III Madrid.
9. David Feil-Seifer. *NSF Computing Innovation Fellow*, 2011-2012. Most recent position: assistant professor, University of Nevada, Reno.
10. Cindy Bethel. *NSF Computing Innovation Fellow*, 2009-2011. Most recent position: assistant professor, Mississippi State University.
11. Fred Shic. *NIH T32 Postdoctoral Scholar*, 2008-2010. Most recent position: associate professor, Department of Pediatrics, University of Washington.

Current graduate students and post-docs

1. Sarah Strohkorb (6th year Ph.D.)
2. Meiyang Qin (4th year Ph.D.)
3. Jake Brawer (4th year Ph.D.)
4. Nicole Salomons (4th year Ph.D.)
5. Tim Adamson (2nd year Ph.D.)
6. Emmanuel Adeniran (1st year Ph.D.)
7. Nicholas Georgiou (1st year Ph.D.)
8. Debasmita Ghose (1st year Ph.D.)
9. Rebecca Ramnauth (1st year Ph.D.)

Dissertation committee member for:

1. Tesca Fitzgerald (external, Georgia Tech, advisors: Ashok Goel and Andrea Thomaz)
2. Siddharth Jain (external, Northwestern, advisor: Brenna Argall), defended 6/19
3. Nick dePalma (external, MIT, advisor: Cynthia Breazeal), defended 12/16.
4. Raymond Ma (Mechanical Engineering, advisor: Aaron Dollar), defended 9/16.
5. Kate Tsui (external, UMass Lowell, advisor: Holly Yanco), defended 4/14.
6. Kamran Shamaei (Mechanical Engineering, advisor: Aaron Dollar), defended 7/14.
7. Ying (Jean) Zheng (Mechanical Engineering, advisor: John Morrell), defended 6/13.
8. Maithilee Kunda (external, Georgia Tech, advisor: Ashok Goel), defended 12/12.
9. Yinghua Wu (advisor: Paul Hudak), defended 2/08.
10. Jianye Lu (advisors: Julie Dorsey and Holly Rushmeier), defended 5/09.
11. Eric Meissner (external, Rensselaer Polytechnic Institute), defended 8/09.
12. Chen Xu (advisors: Julie Dorsey and Holly Rushmeier)

Master of Science students supervised

1. Alex Litiou (2012-2015) - Personalized Instruction of Physical Skills with a Social Robot
2. Marek Doniec (2006-2007) – Joint Attention and Declarative Pointing
3. Viksit Gaur (2005-2006) – Discrimination of Animacy from Visual Cues
4. Jim Logan (2004-2005) – PlayTest: A Diagnostic Audio-Preference Recorder for Home Use
5. Ryan Gehl (2002-2003) – Models of Vocal Prosody
6. Marek Michalowski (2002-2003) – Methods for Modifying Visual Scanning Patterns
7. Shawn Walker (2001-2002) – Construction of an Active Vision System (Mechanical Engineering)

Special Registration students supervised

1. Marek Doniec (2005-2006) – DAAD scholarship winner (German Academic Exchange Service)
2. Philipp Michel (2003-2004) – DAAD scholarship winner (German Academic Exchange Service)

Completed undergraduate thesis projects (CS 490 unless noted)

- 2019-2020
 1. Hannah Burgess (Cognitive Science)
 2. Kayleigh (Kaleb) Bishop, *Referring Expression Generation for Embodied Collaborative Tasks* (Cognitive Science)
- 2018-2019
 1. Sean Hackett, *Sensing Group Dynamics via Backchannels*
 2. Stephanie Hickman, *Creating a Job Interview Simulator for Young Adults with ASD using Web-Based Technologies, Speech Analysis and Dynamic Response Mechanisms.*
- 2017-2018
 1. Priyanka Krishnamurthi, *Robots That Cheat: Exploring Violations and Reparations of Trust in Human-Robot Interactions*
 2. Zong Xuan Tan, *Robotic Learning of Ownership Relations and Norms*
 3. Aleksandra Zakrzewska, *Adapting Tutoring Behavior to Student Needs*
 4. Bhavani Ananthabhotla, *Accounting for User Preference During a Human-Robot Collaborative Task*
 5. Michael van der Linden, *Training a Robot to Collaborate with a Human Partner*
- 2016-2017
 1. William Bachelard-Bakal, *Improving Training Games for Children with Autism and ASD*
 2. Arthur Chen Erlendsson, *Depth estimation from video with a single RGB camera of known position*
 3. Brahm Gardner, *Collision Avoidance System for the Baxter Robot*
 4. Alexander Tymchenko, *Server and Robot Platform Development for Socially Assistive Robot Interactions with ASD Children*
 5. Brahm Gardner, *Position and Velocity Controllers for the Baxter Robot (CS290)*

6. Juliette Grantham, *Developing Software Tools for the Analysis of ASD Child-Robot Interactions*
- 2015-2016
 1. Eric Anderson, *Data Driven Development of Sailboat Controllers*
 2. Mary Farner, *A Kinematic Self Calibration Model for Tool Use and Body Schema*
 3. Eric Ho, *Developing Adaptive Social Robot Tutors for Children*
 4. Kevin Jiang, *Educational Robotics and the Individual Tutorial: Exploring the Effects of Personalization on Attention and Help-Seeking Behavior*
 5. Arsalan Sufi, *Administering Breaks to Students during Tutoring Sessions: A Human-Robot Interaction Study*
 6. Frank Wu, *Learning to Help: Employing Motion Capture, Computer Vision, and Machine Learning to Enable Human-Robot Interaction*
 7. Eli Block, *Robot Idling Behaviors*
 8. Kevin Kirk, *Synthesizing Eye Gaze from a Multi-Camera View*
 9. Hannia Zia, *EfiT: Developing child-robot learning interactions*
 10. Andrew O'Donnell, *MAKI Oculomotor Control*
 - 2014-2015
 1. Terin Patel-Wilson, *From Text to Task: Developing a Robust Symbolic Task Planner for Interpreting Natural Language Instruction*
 2. Rachel Protacio, *Basketball Detection and Tracking for Free Throws*
 3. Apurv Suman, *Robots Induce Mimicry in Humans*
 4. Eric Ho, *Analyzing Physiological Signals from Interactions with a Cheating Robot (CS 290)*
 - 2013-2014
 1. Nathaniel Weinstein, *The influence of visual and verbal presentation styles on the success of a computer-assisted learning module for math (CogSci senior essay)*
 2. Jeffrey Zhu, *Preliminary Attitudes toward Multiple Robotic Personalities within a Shared Embodiment*
 3. Feridun (Mert) Celebi, *A smooth-pursuit calibration technique (CS 290, jointly supervised with Fred Shic)*
 - 2012-2013
 1. Sam Spaulding, *Perception for a dual-armed robot workbench for social learning*
 2. Caroline Banks, *Cheating as a mechanism for manipulating perceptions of agency*
 - 2011-2012
 1. Kenny Castaneda, *Design of a 6-DOF humanoid robot arm (Mechanical Engineering senior project)*
 2. Gabriel Fernandez, *Design of a 6-DOF humanoid robot arm (Mechanical Engineering senior project)*
 3. Max Uhlenhuth, *Robotic Software Package for HRI ASD Study*

4. Joshua Tan, *A Theory of Value* (Ethics, Politics, and Economics senior essay)
- 2010-2011
 1. Wilma Bainbridge, *Effects of Embodiment on Human-Robot Interaction* (Cognitive Science senior essay)
 2. Eleanor Avrunin, *Factors in Perceptions of Robotic Motion and Dance*
 3. Rahil Esmail, *The Influence of Sociability and Competence on the Judgment of Robots*
 - 2009-2010
 1. Matthew DuPont, *Keep On, Keepon*
 2. Julian Rajeshwar, *Keep on, Keepon*
 3. Elaine Short, *Attentional Models for Robot Gaze Control*
 - 2008-2009
 1. Emily Bernier, *The Similarity-Attraction Effect in Human-Robot Interaction*, (CS and Psychology senior essay)
 2. David Golub, *Kinematic Learning for Humanoid Robots*
 3. Alexander Lemon, *Function Approximation Using Neural Networks with an Application to Character Recognition*, (CS and mathematics senior essay).
 4. Graham Radman, *The Importance of Perceptual Resolution in Naïve Gesture Emulation*, (CS and Psychology senior essay)
 - 2007-2008
 1. Laura Gehring, *Gender recognition from activity and vocal profiles*
 2. Erica Newland, *New Approaches to Classifying Speech Utterances for Prosodic Content* (Applied Mathematics senior essay)
 3. Lance Cai, *A Model for Learning Verb Context and Meaning Based on Dynamics Information*
 - 2006-2007
 1. Jordan Winnick, *The Design and Construction of a Robot for Use in the Study of Autism* (EECS senior project)
 2. Chris Crane, *The Design and Construction of a Robot for Use in the Study of Autism*.
 - 2005-2006
 1. Erica Baller, *The Art of Manipulation*.
 2. Emily Pitler, *Robotic Perception of Causality*.
 3. Emily Wang, *A Model for Learning the Meaning and Usage of Numbers*.
 - 2004-2005
 1. Jian Yuan, *Looming and Visual depth perception*
 2. Elizabeth Darbie, *Multi-modal tracking based on isometric views*
 3. Timothy Condon, *The Pirate's Code: Social Choice and Aggregation Methods*.
 4. James Kim, *Pressure-Sensitive Flexible Robotic Skin*.
 5. Reuben Grinberg, *Autistic Spectrum Classification of Gaze Tracking Data*.

6. Xin Tong, *Gender Recognition in Adult Male and Female Speech*.
- 2003-2004
 1. Vincent Panzano, *Deriving Parameters for a Visual Attention Models from Human Gaze Patterns*, (Cognitive Science senior essay).
 2. Andrew Lovett, *Using a robot to re-examine human looking time experiments*, (Cognitive Science senior essay).
 3. Adam Cushner, *ViSITAR: Visual Surveillance and Interaction Tracking for Autism Research*.
 4. Byron Igoe, *The Bigger Picture: Relating Visual and Auditory Cues to Develop the Beginnings of a Mind's Eye*.
 5. Bertrand Maher, *Building a Device for Testing Listening Preferences of Autistic Children*.
 - 2002-2003
 1. Jeffrey Kinsey, *Automating Word Segmentation of Phonemic Transcriptions*, co-advised with Charles Yang.
 2. Andrew Lovett, *ILAB: Infant-Like Attentional Behavior*.
 3. Avi Robinson-Mosher, *Prosody Recognition in Male Infant-Directed Speech*.
 4. Joseph Dvorkin, *Deducing Intent of Unidentified Objects*.
 5. Ross Eaton, *ViSIT: Visual Surveillance and Interaction Tracking*.
 6. Stephen Elliott, *Toward a Visual Attention Memory System (VAMS)*.
 7. Daniel Grollman, *Glwys, the robotic rat*.
 8. Manfred Lau, *A System for Auditory Localization*.
 9. Hanlin Qian, *Computational Modeling of Human Attention in Multiple Object Tracking*.
 - 2001-2002
 1. Kushal Dave, *Using cluster analysis to automatically thread discussion board messages*, co-advised with Charles Yang.
 2. Adam Ecker, *Models of the Motor Theory of Speech Recognition*, Psychology.
 3. Matthew Herberg, *Development of a Vision System for a Humanoid Robot*.
 4. Max Kushner, *Making Robots More Human(e)*.
 5. James Stuart, *GWTsim: Grey Walter Tortoises in Complex Environs*.
 6. Marek P. Michalowski, *A Machine Learning System for Identifying Animate Motion*.