Curriculum Vitae

Maja J Matarić

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EDUCATION

Ph.D., Computer Science and Artificial Intelligence, Massachusetts Institute of Technology, May 1994. Dissertation: *Interaction and Intelligent Behavior*. Advisor: Prof. Rodney A. Brooks. Minor in Management of Technological Innovation.

S.M., Computer Science, Massachusetts Institute of Technology, Jan 1990. Thesis: A Model for Distributed Mobile Robot Environment Learning and Navigation. Advisor: Prof. Rodney A. Brooks.

B.S., Computer Science, Honors and Distinction, University of Kansas, May 1987. Honors thesis: *Advisor: An Intelligent Knowledge-Based System for Computer Science Curriculum Advising.* Advisor: Prof. Frank Brown. Minor in Cognitive Neuroscience.

PROFESSIONAL

USC Distinguished Professor, Jan 2019-present.

Principal Scientist, Google DeepMind, Aug 2023-present (on sabbatical from USC)

Visiting Faculty Researcher, one day per week, Google Brain, Jul 2022-July 2023

Lead, USC Viterbi K-12 STEM Center, July 2019-Dec 2022.

Special Advisor to the USC Provost, Aug-Dec 2021.

USC Interim Vice President of Research, Jan 2020-Jul 2021.

Co-Founder, Embodied, Inc., 2016-present.

Chan Soon-Shiong Chaired Professor, Viterbi School of Engineering, University of Southern California. Oct 2012-present.

Professor, Computer Science Department, Pediatrics Department, and Neuroscience Program, University of Southern California. Apr 2006-present.

Founding Director, Robotics and Autonomous Systems Center (RASC, rasc.usc.edu), (originally Robotics and Embedded Systems (cres.usc.edu), USC. Aug 2002-present.

Co-Director, USC Robotics Research Laboratory (robotics.usc.edu), and Associate Director, USC Institute for Robotics and Intelligent Systems (IRIS). Jan 1998-present.

Founding Director, Interaction Lab. Apr 1995-present.

Chief Science Officer, Embodied, Inc., 2016-Nov 2018.

Vice Dean for Research, Viterbi School of Engineering, University of Southern California. Jul 2011- Dec 2019.

Senior Associate Dean for Research, Viterbi School of Engineering, University of Southern California. Jul 2006-Jul 2011.

President of the Academic Senate, University of Southern California. Jun 2006-Jun 2007.

Associate Professor, Computer Science Department and Neuroscience Program, University of Southern California. Apr 2001-Apr 2006.

Assistant Professor, Computer Science Department and Neuroscience Program, University of Southern California. Sep 1997-Mar 2001.

Assistant Professor, Computer Science Department and Volen National Center for Complex Systems, Brandeis University. Jan 1995-Aug 1997.

Postdoctoral Fellow, MIT Artificial Intelligence Laboratory. Jun-Dec 1994.

Research Assistant, MIT Artificial Intelligence Laboratory. Sep 1987-Jun 1994.

Research Scientist, GTE Labs, Waltham, MA. Host: Dr. R. Sutton. Jun-Aug 1991.

Research Scientist, Free University of Brussels, Belgium. Host: Prof. L. Steels. Jun-Aug 1990.

Consultant, Advanced Research and Development Group, LEGO Futura, Cambridge, MA. Supervisor: A. Toft. Aug 1989-Aug 1990.

Member of Technical Staff, Jet Propulsion Lab, NASA, Pasadena, CA. Supervisor: D. Atkinson. Jun-Aug 1988.

Intern, Software Engineering, NCR Inc., Wichita, KS. Supervisor: R. Meals. May-Aug 1987 & 1986.

Visiting Appointments

Visiting Researcher, ATR Human Information Processing Research Laboratory, Kyoto, Japan. Host: Dr. M. Kawato. Jul-Aug 1996.

Visiting Professor, 'Ecole Polytechnique F'ed'erale de Lausanne (EPFL), Lausanne, Switzerland. Host: Prof. J-D. Nicoud. Sep 1994.

Visiting Professor, Swedish Institute for Computer Science, Stockholm. Host: Dr. M. Nilsson. Oct 1994.

TEACHING

University Courses: developed 7 (marked with ★), taught 10:

- 1. CSCI 697 *Computer Science PhD Seminar*. A seminar course that presents a wide variety of research projects by CS Department faculty. Taught in fall 2022, spring 2023.
- 2. *ENG 150 Engineering Science and Systems: From Humans to Robots. A new all-engineering undergraduate course supported by the School of Engineering Dean and USC Provost; lab-based with sophisticated humanoid mobile robots, featuring team work and public contests at the California Science Center. Taught in 2007, 08, and 09.
- 3. *CS 445 Introduction to Robotics. Hands-on lab course using LEGO kits electronics, teamwork and contest. Developed the course and raised funds for the laboratory equipment and web resources; received the USC Innovative Undergraduate Teaching Award 1999-2000. (Text: The Robotics Primer Matarić, MIT Press.) Due to popular demand, the course is taught every semester by 3 faculty in rotation.
- 4. *CS 584 Control and Learning in Mobile Robots and Multi-Robot Systems. Developed the course, originally taught it as CS 599 Mobile Robots and Multi-Robot Systems; taught annually.
- 5. *CS 599 Perceiving and Controlling Humanoid Behavior. Developed & taught, spring 2001.
- 6. CS 460 Artificial Intelligence (Text by Russell and Norvig). Taught in fall 1997.

- 7. *COSI 215 Advanced Topics in AI: Analytical Models. Developed & taught, spring 1996.
- 8. *COSI 117 Control and Learning in Autonomous Agents. Developed the course and initially taught it as COSI 112 Theory and Models of Autonomous Agents, fall 1994, spring 1995.
- 9. *****USEM 71a *Social Behavior* (Texts: Evolution of Cooperation R. Axelrod, How Monkeys See the World D. Cheney and R. Seyfarth, In the Shadow of Man J. Goodall, You Just Don't Understand D. Tannen, The Anatomy of Love H. Fisher.) Developed & taught, fall 1996.
- 10. COSI 21b Structure and Interpretation of Computer Programs (Text: Abelson and Sussman), taught spring 1997.

Other teaching experience:

Course Organizer, NATO Advanced Study Institute, *Practice and Future of Autonomous Agents*, Monte Verita, Switzerland. Short course on mobile robot control. Sep 1995.

Teaching Assistant, NATO Advanced Study Institute, *Biology and Technology of Intelligent Autonomous Agents*, Trento, Italy. Mobile robot lab design and coordination. Mar 1993.

Teaching Fellow, University of Kansas, Lawrence, KS. Recitations and sessions for: CS200 Pascal, CS210 Discrete Structures, CS300 Basic Programming Structures and Algorithms, CS660 Data Structures. Sep 1985-May 1987.

RESEARCH SUPERVISION

Ph.D. Advisor to 31 USC Students:

Graduated Ph.D. Students (23):

- 1. Dani Goldberg, Jun 96-May 2001, Ph.D. May 2001, "Evaluating the Dynamics of Agent-Environment Interaction," now senior software engineer at Bluefin Robotics, Waltham, MA.
- 2. Monica Nicolescu, Sep 98-May 2003, Ph.D. May 2003, "A Framework for Learning From Demonstration, Generalization and Practice in Human-Robot Domains," now tenured full professor of Computer Science at University of Nevada, Reno.
- 3. Brian Gerkey, Sep 98-May 2003, Intel Graduate Fellow, 2001-02, Ph.D. May 2003, "On Multi-Robot Task Allocation," now CEO of Open Robotics.
- 4. Odest Jenkins, Sep 98-Sep 03, USC All-University Predoctoral Fellow 1998-2001, Ph.D. Sep 03, "Data-driven Derivation of Skills for Autonomous Humanoid Agents," previously assistant and associate professor at Brown University, Sloan Fellow, PECASE awardee, now tenured full professor of Computer Science at the University of Michigan.

5. Christopher Vernon Jones, Sep 01-May 2005, Ph.D. May 2005, "A Principled Design Methodology for Minimalist Multi-Robot System Controllers," now CTO of iRobot Corp.

- 6. Evan Martin Drumwright, Sep 01-May 2007, Ph.D. May 2007, "The Task Matrix: A Framework for Robot-Independent Programming of Humanoids," previously assistant professor of Computer Science at George Washington University, then engineer at the Toyota Research Institute, now CEO of Dextrous Robotics, Inc.
- 7. Jeffrey Singley Norris, Sep 01-Mar 2008, Ph.D. Mar 2008, "Perceptually Motivated Symbol Generation," group supervisor, Planning Software Systems, NASA Jet Propulsion Laboratory, now at Apple, Inc.
- 8. Dylan Shell, Sep 02-May 2008, USC Graduation Completion Fellow 2007-08, Ph.D. May 2008, "Macroscopic Approaches to Control: Multi-Robot Systems and Beyond," now tenured full professor of Computer Science at Texas A&M University.
- 29. Emily K. Mower, Sep 04-Oct 2010, NSF Graduate Research Fellow, Herbert Kunzel Engineering Fellow, Intel Fellow, Ph.D. Oct 2010, "Emotions in Engineering: Methods for the Interpretation of Ambiguous Emotional Content," now tenured associate professor of Computer Science at the University of Michigan.
- 10. David Feil-Seifer, Sep 03-Oct 2011, Annenberg Research Fellow, Mellon Mentoring Award, Order of Arete' Recognition Award. Ph.D. Jan 2012, "Data-Driven Interaction Methods for Socially Assistive Robotics: Validation with Children with Autism Spectrum Disorders," CIF postdoc fellow at Yale University, now tenured associate professor of Computer Science at the University of Navada, Reno.
- 11. Nathan Koenig, Sep 04-Sep 2012, Ph.D. Nov 2012, "Incremental Life-Long Task Learning from Human Demonstrations", now CTO at the Open Robotics.
- 12. Juan Fasola, Sep 2007-Jun 2014, Ph.D. Jul 2014, "Socially Assistive and Service Robotics for Older Adults: Methodologies for Motivating Exercise and Following Spatial Language Instructions in Discourse," now at GM (via Cruise Automation).
- 13. Aaron St.Clair, Sep 08-Aug 2015, Viterbi School of Engineering Fellow, Ph.D. May 2015, "Coordinating Communication in Human-Robot Task Collaborations", postdoctoral fellow at Georgia Institute of Technology Computer Science Department 2015-17, now at Huawei, Inc.
- 14. Ross Allan Mead, Sep 08-Dec 2015, NSF Graduate Research Fellow, NSF GK-12 Fellow, Ph.D. Jan 2016, "Situated Proxemics and Multimodal Communication: Space, Speech, and Gesture in Human-Robot Interaction", now founder and CEO of Semio, Inc.
- 15. Elaine Short, Aug 2010-May 2017, NSF Graduate Research Fellow, USC Provost Fellow. Ph.D. May 2017. "Modeling Multi-Party Social Dynamics for Socially Assistive Robotics", previously a postdoctoral fellow at the University of Texas, Austin, now an assistant professor of Computer Science at Tufts University.

16. Elizabeth Cha, Aug 2014-Oct 2018, NSF Graduate Research Fellow, NASA Graduate Research Fellow, USC Viterbi Fellow. Ph.D. Oct 2018. "Nonverbal Communication for Non-Humanoid Robots", now at Waymo, Inc.

- 17. Caitlyn Clabaugh, Aug 2013-Dec 2018, NSF Graduate Research Fellow, USC Provost Fellow. Ph.D. Dec 2018. "Human-Robot Learning: Computational Personalization for Socially Assistive Robotics", now at Embodied, Inc.
- 18. Katelyn Swift-Spong, Aug 2011-Mar 2019, NSF Graduate Research Fellow, Ph.D. 2019, "Towards Socially Assistive Robot Support Methods for Physical Activity Behavior Change", now senior data scientist at Intuit.
- 19. Sebástien Arnold, Aug 2021-Jan 2023 (inherited from Prof. Fei Sha), Ph.D. 2023, "Quickly Solving New Tasks, With Meta-Learning and Without", now at Google.
- 20. Thomas Roy Groechel, July 2018-Feb 2023, Ph.D. 2023, "On Virtual, Augmented, and Mixed Reality for Socially Assistive Robotics", now at iRobot.
- 21. Christopher Birmingham, Aug 2018-Mar 2023, Ph.D. 2023, "Multiparty Human-Robot Interaction: Methods for Facilitating Social Support."
- 22. Lauren Klein, Aug 2018-May 2023, Viterbi Research Fellow, Ph.D. 2023, "Modeling Dyadic Synchrony with Heterogeneous Data: Validation in Infant-Mother and Infant-Robot Interactions", postdoc at Stanford U.
- 23. Nathan Dennler, Aug 2019-Dec 2024 (co-advised with Prof. Stefanos Nikolaidis), NSF Graduate Research Fellow, Viterbi Research Fellow, Ph.D. 2024, "Physical and Social Adaptation for Assistive Robot Interactions", joined Uber.

Current Ph.D. Students (8):

Leticia Pinto Alva (Aug 2021-present, co-advised with Prof. Jesse Thomason)

A'di Dust (Jun 2023-present)

Mina Kian (Aug 2021-present, Viterbi Research Fellow)

Amy O'Connell (Aug 2021-present, Viterbi Research Fellow)

Kaleen Shrestha (Aug 2023-present, NSF Grad4US Fellow)

Zhonghao Shi (Jun 2020-present)

Emily Weiss (Aug 2024-present, Viterbi Research Fellow)

Kaitlin Zareno (Aug 2024-present, co-advised with Prof. Shri Narayanan)

Brandeis University Ph.D. students (4): Brendan Kitts (Sep 95-May 97), Zachary Mason (Sep 96-May 97), Richard Watson (Sep 96-May 97), Gregory Hornby (Sep 96-May 97).

Master's Research/Thesis Advisor to 66 students: Prateek Agarwal (2019-20), Aras Akbari (08-11), Sairam Bandi (2021-22), Iti Bansal (2014), Han Chen (2021-23), Ken Chen (2009-11), Liquan Chen (2015-16), Wen Chen (2019-), Raul Correal-Tezanos (2006-09), Shoubhik Debnath (2016-09), Shoubhik (2016-09),

17), Marton Demeter (2017-18), Eric Deng (2017-18), Aditi Dixit (2015-16), Darren James Earl (2007-09), Muhammad Emad-Ud-Din (2007-08), Tiantian Feng (2013-14), Ajo Fod (1999-01, MS 02), Sanford Freedman (2004-06), Rebecca Funke (2017-18), Richa Gangwar (2015), Shilpa Gollapudi (2015), Abishek Hariharan (2015), Farva Jafri (2010-11), Abiola Johnson (2022-23), Pierre Johnson (2008-11), Kristin Jordan (2017-20), Chan Jordan (2008-09), Yongsek Joung (2018-19), Kyong Kang (2004-06), Saurabh Kshirsagar (2020), Greg Lawler (2017-19), Xuan Liu (2016-17), Lixing Liu (2016-17), Venkatesh Lokare (2018), Fengzhou Long (2015-16), Aswath Mohan (MS May 99), Avinash Parnandi (2009-10), Parth Patel (2013), Vishwa Theja Pokala (2014-15), Salman Qadri (2006-07), Tejas Ram (2014-16), Sahiti Ramaraju (2021-23), Amit Ramesh (2000-04, MS 05), Viren Ranjan (2006-07), Karla Lopez Sanchez (2021-22), Shrinjar Sarkar (2019-20), Shashank Saurabh (2020), Anurag Shukla (2016-17), Samuel Shuster (2012-13), Vikramjeet Singh (2010-11), Abinaya Sree (2013-14), Michael Swan (2019-22), Dhiti Thakkar (2019-), Balasubramanian Thiagarajan (2018-20), Helen Yan (2001-03, MS May 03), Yi Yue (2013-14), Joshua Wainer (2005-07), Tong Wu (2019-20), Gaoshu Zhao (2019-20). Brandeis (2): Aruna Sankaranarayanan (MS May 97), Julia Novikova (1997).

Ph.D. Thesis Committee Member to: Leili Tavabi (2022-), Xin Zhu (2022-), Shariq Iqbal (Aug 2021-May 2022, inherited from Prof. Fei Sha), Nikolaos Flemotomos (2020-22), Victor Ardulov (2021-22), Eli Pinkus (2019-20), Michael Tsang (Nov 2019), Prashanth Shivakumar (Nov 2019-20), Kalesha Bullard, Georgia Institute of Technology (May 2019), Sharon Niv (Jan 2012), Po-He Tseng (Oct 2011), Brenna Argall, CMU (Mar 09), David Naffin (Dec 05), Maxim Batalin (Mar 05), Boyoon Jung (Mar 05), Changhee Han (Sep 04), Kevin Dixon, CMU (Jan 04), Robert Price, University of British Columbia (2003), Chalermek Intanagonwiwat (Jan 02), Sanza Kazadi, Caltech (Jun 2000), Vincent Darley, Harvard (May 99), Georgi Stojanov, Syril and Methodius University, Skopje, R. Macedonia (Jun 97), Jelena Godjevac, 'Ecole Polytechnique F'ed 'erale de Lausanne EPFL, Switzerland (Dec 96).

Thesis Proposal/Qualifying Exam Committee Member (excluding completed PhDs listed above): Signe Bray, Caltech (May 2005), Behnam Salemi (Jan 02), Ya Xu (Sep 01), Erhan Oztop (Feb 00), Haobo Yu (Jun 99), Jun Park (Nov 99), Ahmed A-G Helmy (Dec 97); at Brandeis: Joseph Cohn (Neuroscience Program, Mar 95), Gabriel Robles (Psychology Dept., Jan 96).

Postdoctoral Supervisor to 20 researchers:

- 20. Morten Frederiksen (April 2022-Dec 2023), researcher at University of Copenhagen.
- 19. Matthew Rueben (Feb 2019-Nov 2020), assistant professor of Biomedical Engineering at University of Portland.
- 18. Naomi Fitter (July 2017-Dec 2018), assistant professor of Computer Science at Oregon State University.
- 17. Amin Atrash (Sep 2010-Aug 2015), at Amazon Inc.
- 16. Eric Wade (Feb 07-Jul 2013), Women in Science and Engineering (WiSE) Fellow (Feb 07-Dec 08), NIH T32 Fellow (2010-13), assistant professor of Mechanical Engineering at the University of Tennessee at Knoxville.
- 15. Dylan Shell (Sep 08-Jul 09), tenured associate professor of Computer Science at Texas A&M University.

14. Adriana Tapus (Dec 05-May 09), Women in Science and Engineering (WiSE) Fellow (Dec 05-Nov 07), professor of Computer science at ENSTA (Ecole Nationale Superieure de Techniques Avances) in Paris, France.

- 13. Odest Jenkins (Sep 03-Jul 04), professor of Computer Science at the University of Michigan.
- 12. Marcelo Kallmann (Mar 03-Jul 04), assistant professor of Computer Science at University of California, Merced.
- 11. Anand Panangadan (Mar 03-Jun 04), assistant professor of Computer Science at California State University Fullerton.
- 10. Ian Kelly (Jan 02-Dec 04)
- 9. Ashley Tews (Oct 01-Oct 04), research scientist at CSIRO, Brisbane, Australia.
- 8. Andrew Howard (Oct 00-Oct 02), lead researcher at SpaceX.
- 7. Torbjorn Dahl (Aug 01-Feb 03), head of Intelligent Systems Research, School of Computing and Engineering, University of Wales, Newport, UK.
- 6. Aude Billard (Jun 99-Jul 00), professor at EPFL, Switzerland.
- 5. Paolo Pirjanian (Jan-Dec 99), CEO, Embodied, Inc.
- 4. Richard Vaughan (Oct 98-Sep 01, co-advised w/ G. Sukhatme), professor of Computer Science at Simon Fraser U., Canada.
- 3. Miguel Schneider (Jan-Aug 97)
- 2. François Michaud (Jul 96-May 97) professor of EECS, University of Sherbrooke, Canada.
- 1. Michael Casey (Jan 96-May 97, Brandeis U. Neuroscience Program, co-advised with E. Marder)

Research Associate Supervisor of visitors/collaborators: Aras Akbari (Oct 2010-May 2012), Jon Eriksson (Nov 03-May 04), Katrin Fischer (PhD student, USC Annenberg School, 2022-present), Morten Frederiksen (Fulbright Scholar, 2019-21), Jakob Fredslund (Aug 00-June 01, Assistant Professor at the University of Aarhus, Denmark), Padmanabhan Krishnamurthy (2019-21, India), Massimiliano Nigro (Politecnico de Milano, MS student, 2022-23), Esben Ostergaard (Aug 00-01, Assistant Professor at the University of Southern Denmark), Jose Carols Pulido (University of Madrid, Mar-Jun 2019), Micol Spitale (PhD student, Politecnico de Milano, Nov 2019-Apr 2020), Kasper Stoey (Aug 99-Aug 00, Associate Professor at the University of Southern Denmark), Anna-Maria Velentza (PhD student, University of Macedonia, Thessaloniki Greece, 2022-23), Jens Wawerla (Sep 01-Jun 02, Ph.D. student at Simon Fraser University), Stefan Weber (Jan 99-Jan 00, Fulbright Scholar).

Undergraduate Research Supervisor to >300 students:

Current (~31):

Jennifer Ayissi, Gianna Beck, Allen Chang, Brenna Chen, Claudia Chiu, Bailey Cislowski, David Delgado, Lydia DiBlasio, Anjali Gophinthan, Anika Gupta, Erica De Guzman, Alice Han, Natalie Humber, Flora Jia, Caroline Kennedy, Julie Kim, Ellen Ko, Andrew Le, Justin Lenderman, Marin Liu, Siqi Li, Leslie Moreno, Sophia Pei, Ashley Perez, Pau Sang, Eusook (Victoria) Shin, Shriya Upadhyay, Nikki Yaminrafie, Daniel Zeng, Emily Zhou.

Past (~300, most are listed):

USC Undergraduates: Boone Adkins (2013-14), Radhika Agarwal (Viterbi Fellow 2017-20, 2017-2021), Michael Allen (2017-18), Nathan Alvarez (Viterbi Fellow 2017-20), Brandon Angelo, Daniel Arbuckle, Alana Archer (Merit Research Scholar, 2015-16), Morelle Arian (Merit Research Scholar 2013-14), Jorge Avila, Sean Bachelder (Engineering Summer Merit Research Fellow, 07-08), Alicia Bargar (NSF REU 2012), Sampurna Basu (2017), Ryan Berti, Adit Bhartia (2018-19), Brandon Carlson, Oziel Carneiro, Mark Camarena, Nisha Chatwani (2020-22), Julia Cordero (2020-22), Conrad Chang (2018-19), Sanket Chauhan (2012), Janet Cheung (NSF REU 2012), Kourtney Chima (2018-20), Shirley Chung (NSF REU 2012-13), Cauchy Choi (Provost's Undergraduate Research Associate Program (URAP) Fellow 2010), Grace Chrysilla (2015-18), Sharon Cohen, Minal Cordiero (NSF REU student, 08), Roddur Dasgupta, Eric Deng (Presidential Fellow, 2014-17), Andrew Downing (2012-14), Jonathan Dye (NSF REU summer 2010-12), Brian Ellenberger, Kody Ferguson, Manu Gandham, Kate Glazko (2012-13, URAP summer 2013), Mary Grace Ermitanio (WiSE Undergraduate Research Fellow), Renuka Fernandes (NSF REU 2013), Ford Filer (Merit Research Scholar 2012), Andrew Fisher (Merit Research Fellow), Dylan Foster (NSF REU 2013-14), Austen Hagio (NSF REU student, summer 2010), Kiely Green (2019), Ipek Göktan (2020-2022), Krystin Hamasaki (2017-19), Jessica Hadiwijoyo (2020-22), Adam Hamden (2018-21), Franklin Haynie (NSF REU summer 07), Yinghui He (2018-20), Brianna Heffernen (2017-19), Mariam Helmy, Dan Ho (NSF REU summer 2010), Lynn Jane Ho (Merit Research Fellow 09), Joan Hong, Zijian Hu (2019-20), Kate Hu (2020-21), Shomik Jain (2018-20), Pierre Johnson, Edward Kaszubski (URAP Fellow summer 2010), Danko Krajisnik (NSF REU summer 06), Alex Jones (Merit Research Scholar 2012), Levonne Key (2012), Julie Ko (2014), Vadim Korolik (Viterbi Fellow, 2016-19), Asia Krupa (NSF REU 2013), Chloe Kuo (2020-22), Jenny (Haemin) Lee, Zixuan Li (2022), Karen Ly (2020-22), Andrea Lawler (Provost's Research Fellow 2013-14), Amy Lee, Rhianna Lee (2016-19), Augenia Anya Lee (2017-19), Suk-Jin (Jutin) Lee (USC Provost's Research Fellow), Karie Lau (USC Merit Research Scholar), Grace Lee (Tiger Woods Foundation summer 2010), Yingchao Lin (URAP 2013), Jack Lucas (Merit Research Scholar 2011-12), Jonahton Lwowki, Urmila Mahadev (USC Women in Science and Engineering Undergraduate Research Fellow 07-08), Karime Maamari (2017-18), Kartik Mahajan (2019-2021) Dipanwita Maulik (2012-13), Emily Meschke (2017-19), Leena Mathur (2018-22, Astronaut Fellow, ACM Undergraduate Research Awardee, many more awards), Zachary Metcalf (URAP summer 2014), Ani Misirian (NSF REU 2012-13), Holly Mitchell (NSF REU 2013), Dhruv Monga (URAP 2012-13), Michael Montalbo (NSF REU 2009-10), Caitlin Moreno (2017-19), Pooja Moolchandani (2017-18), Christine Nagy (NSF REU fall 2013), Amy Nham (URAP 2013), Shirin Nikaein (NSF REU 07), Hieu Minh Nguyen (Spring-Fall 2010), John O'Hollaren (NSF REU summer 09, USC URAP fall 2010, Merit Research Scholar fall 2011), Sarah Okamoto (2021-22), Emily Ondon (2021), Roxanna Pakkar (Viterbi Fellow, 2015-20), Kun Peng (2019), Brandon Pereira (2014), An Pham (2018), Cameron Pickham (2012-13), Xiaoyang Qiao (2019), Ziaoyang Oiao (2021-22), Audrey Roberts (2017-18), Changxiao Ruan (2021-22), Donovan Schafer (Engineering Summer Merit Research Fellow 06), Siqi (Kevin) Shan (2021), Victor Sherman (2011-12), Zhonghao Shi (2018-20), Sophia Small, Shrivani Srivastava, Kristine Skinner (USC Women in Science and Engineering Undergraduate Research Fellow Sep 05-May 07), Rachel Solomon (2017-18), Au Song (2016-18), Jeremy Stell-Smith (USC Merit Research Scholar), Ryan Stevenson (2017-19), Kaushik Tandon (2017), Suveena Thanawala (2016-17), Emerick Varga (NSF REU 2012), Christian Wagner (2016-17), Charles Wang (NSF REU summer 2010), Cherrie Wang (Merit Research Scholar, 2015-16), Panthong Wangperawong, Connie Wu (URAP 2013),

Tiffany Youn (2014), Tianchen Frank Zhang, Yiyi Zhang (URAP), Peter Zhang (NSF REU), Brian Zhang (2016-17), Yulun Zhang (2019-20), Yu Zhang (2019-20), Joseph Zhou (NSF REU 08).

External NSF REU Summer Fellows (16): Julia Chaves (2010), Nathan Dennler (2018), Jordan Ezzell (2012), Kyle Heldman (2009), Dan Ho (2012), Jeff Kamei (2012), George Kazenavette (2018), Michelle Kim (2019), Gregory Koch (2012), Gavin McCarter (2010), Parimal Mehta (2019), Dorian Rahamim (2011), Elaine Short (2009), Kyle Taylor (2008), Tarik Tosun (2011), Jeffrey West (2011).

USC Viterbi Summer Undergraduate Research Experience (SURE) (12): Sophia Fang (2005), Adnan Karim (2019), Heidi Negron-Arroyo (2014), Elijah Reber (2019), Eitan Rothberg (2019), Sara Seko (2013), Matthew Tang (2019), Xongyi Zia (2014),

Computing Research Association (CRA) Committee on the Status of Women in Computing (CRA-W) Research Distributed Mentor Program Undergraduates (DREU) Program (6): Alexandra Constantin (2005), Jennie Vongsoasup (2006), Alicia Bargar (2012), Callie Clement (2013), Anna Duboscq Flynn (2014), Katherine Sittig-Boyd (2015).

Other External Scholars (3): Chongkai Gao (Tsinghua University summer visitor, 2019), Alex Neiss (Technical University of Munich, summer 09), Aravindh Mahendran (Viterbi India Program scholar, summer 2011).

Brandeis Undergraduates (2): Dani Goldberg (Honors Thesis: Using Interference to Design Efficient Robot Group Behaviors, Jun 96, Brandeis Computer Science Dept.), Prem Melville (Sep 96-Aug 97, Brandeis Undergraduate Research Fellow).

MIT Undergraduate Research Opportunity Program Undergraduates (5): Sonu Aggarwal (Jan-Dec 90), Matthew Marjanovic' (May 92-Jan 93), Magdalena Leuca (Jan-Dec 90), Stanley Wang (Jan-May 91), Owen Wessling (May 90-May 91).

<u>SELECTED INITIATIVES AS INTERIM VICE PRESIDENT OF RESEARCH (Jan 2020-Jul 2021)</u>

Saw USC reach its record of nearly \$1B in externally-funded research and increase innovation in 2020-21 while also successfully navigating through the COVID-19 pandemic. Oversaw a staff of 166, spanning 9 organizations: Department of Contracts and Grants, Department of Animal Facilities, the Institutional Animal Care and Use Committee, Office of the Protection of Human Subjects and the Institutional Review Board (IRB), Office of Research Integrity, USC Stevens Center for Innovation, Washington DC Office of Research, Office of Research Initiatives and Facilities, and Research Technology Services. Also oversaw the Institute of Creative Technologies, a US Army UARC.

Research Engagement and Strategy:

Established and chaired the USC Research Council, bringing together research deans and research relevant leads to continually work on USC research strategy and tactics. Met semi-monthly.

Established and chaired the USC Innovation Council, bringing together innovation leads across USC to update the IP policy and enhance the university's culture of innovation. Met semi-monthly.

Established and chaired the USC Research Council to comprehensively address issues of research data collection, storage, security, and sharing. Met semi-monthly.

Developed an analysis and strategy for doubling USC research.

Collaboratively developed a strategy for USC AI/Data Science.

Awarded almost \$7.5M in internal research grants to a broad span of USC research projects, new collaborative teams, and strategic initiatives.

Introduced incentives and resources for shared datasets and data repositories.

Research Strategy During the COVID-19 Pandemic:

Member, Public Health Policy Advisory Group

May 2020-present

Chair, Project Restart Research Working Group

May 2020-Aug 2021

Chair, Project Restart Contract Tracing Working Group

May 2020-Jul 2021

Set up a comprehensive web portal for COVID-19 research policies in 2020.

Set up a comprehensive web portal for COVID-19 research resources, networking teams and experts, and facilitating research in 2020.

Awarded \$1.7M in internal COVID-19 focused research funding in 2020.

Held an open-to-all forum on "USC Research during COVID-19" in August 2020

Oversaw significant growth of proposal submissions during the pandemic, in particular by groups that elsewhere saw a decline (including women and less represented groups).

Oversaw new workforce planning toward improving both productivity and individual preferences around remote work.

Outreach to the research community:

Set up a monthly Research Update e-newsletter to the USC research community.

Set up an annual virtual open-to-all day-long fall forum on "Navigating Research at USC".

Infrastructure and operations:

Streamlined the structure of the Office of Research into nine suborganizations serving key USC research support functions.

Grew the USC IRB staff to match research needs and respond to pandemic-related growth.

Streamlined animal operations and IACUC.

Oversaw the successful reaccreditation of USC's IRB in 2020.

Oversaw the successful reaccreditation of USC's Department of Animal Resources in 2020.

Lead the redesign and update of the entire Office of Research web portal.

Initiated the setup of innovate.usc.edu, a one-stop resource for USC innovation activities.

SELECTED INITIATIVES AS VICE DEAN FOR RESEARCH (Jul 2006-Dec 2019)

Research Strategy:

Annual Viterbi Research Retreat (2007-2019)

Monthly Viterbi Research Committee meetings (2000-2019)

Model for sustainable shared research infrastructure (2019)

Interdisciplinary Programs:

Viterbi Internal Center Incubator, supported over a dozen strategic internal research centers (2010-2019)

The USC Health Technology Engineering program (HTE@USC) (participated in the program design and inception, 2008)

Retreats with USC Schools of Medicine, Gerontology, Social Work, Communications, College of Letters, Arts and Sciences, and Children's Hospital Los Angeles (2006-2019)

Research Programs & Tools to Facilitate Research Excellence & Research Excellence:

USC Center for Excellence in Research (2006)

Weekly research newsletter and web portal (2007-2019)

On-line research topic database for facilitating research collaboration (2007-2019)

Web portal with resources for junior faculty (2006)

Annual internal grant proposal review and mentoring program (2007-2019)

A system for facilitating teaming and preparation of large/center-scale proposals (2019)

PhD, Postdoc, and Undergraduate Student Research and Career Mentoring:

Twice-yearly mentoring panel for academically-bound PhD students and postdocs (2007-2019)

Annual PhD fellowship training workshop (2006-2019)

Twice-yearly "office hours" for familiarizing undergrads with research (2018-2019)

Undergraduate-faculty research matching tool (2008)

Faculty Recognition and Equity:

Set up Viterbi Awards Office (2012-2019)

Gender equity efforts for Viterbi School service and course materials (2018)

K-12 EDUCATIONAL OUTREACH

New Programs Developed & Established:

Robotics and Coding Academy, USC Neighbor Outreach (UNO)-supported elementary school program: Designed and coordinate a free in-school STEM program using robotics to teach programming skills to elementary school students from under-resourced inner-city schools, two consecutive grants (2015-2017)

Unified the USC Viterbi K-12 STEM outreach programs into the K-12 STEM Center (2019)

NSF Research Experience for Teachers (RET) Sites: PI of two consecutive awards (2011-2019)

Viterbi School NSF GK-12 grant: co-PI of the grant and program (2012-15)

VAST: USC Viterbi School of Engineering Adopt-a-School Adopt-a-Teacher K-12 STEM outreach program that encompasses over 12 different year-round programs

USC Robotics Open House: Designed, recruited faculty, and lead the annual program (since 2010; up to 2000 visitors/event)

STEM Spotlight: Designed and oversee three annual engineering-department themed public outreach months/events (since 2014)

SHINE: Designed and oversee the Program that pairs top high school students with USC Viterbi engineering faculty for summer research (since 2014)

Robotics Science In-Class Modules for elementary school students: Collaborated with two elementary school teachers in South Pasadena to develop reusable in-class science modules for 1st, 2nd, 4th, and 5th graders, Fall 2009.

Robotics In-School 7th Grade Class for middle school students: Collaborated with a middle school teacher in South Pasadena to develop a class that is part of the electives curriculum, Summer 2013.

Robotics Summer and After-School Courses for K-12 students: Designed and co-developed permanent summer and after-school robotics courses for 5th-8th grade students in South Pasadena, and a training course for elementary and middle school teachers who then conduct the courses, with support from the NSF Research Experience for Teachers program and the South Pasadena Educational Foundation. Started as summer courses in 2008, added after-school programs in 2011, added a partner school (Los Alisos, Norwalk, CA) in 2011, and introduced an elective in-school class in fall 2013 (see above), courses are still running.

Middle School Teacher Training in faculty labs at USC: PI of USC Societally Relevant Engineering Technologies-Research Experience for Teachers (SRET-RET), an NSF Research Experience for Teachers (RET) Site that brings 12 middle school teachers each summer to the USC Viterbi School of Engineering to get involved (in pairs) in faculty research labs while also receiving STEM pedagogy courses. Summers 2009-2019.

Computational Thinking for High School teachers: with support from Google's CS4HS program, presented a CSMARTS program to 12 teachers in summer 2013 and 2014.

Robotics and Coding Academy for Middle School students: Co-developed and obtained support (though the USC Neighborhood Outreach Program) for a program that has USC CS PhD and undergraduate students teaching middle school teachers and students how to program, using robotics as a unifying theme, culminating in a regional Botball and Botball Junior competition, Sep 2015-Aug 2016.

Hands-on Robotics for STEM (Science, Technology, Engineering and Math) Education: Jointly developed 6th and 8th-grade robotics-enhanced science course materials and trained two LA middle school teachers, supported by the NSF Research Experience for Teachers (RET) program, Jul 2003-Aug 2005.

Hands-on Robotics for Enhancing Middle-School STEM Education and Increasing Participation of Under-Represented Students: Jointly developed 6th-8th grade robotics courses and trained 4 middle school teachers, supported by the USC Neighborhood Outreach (UNO) program, Jul 2005-Jun 2006.

Hands-on Robotics for Enhancing Elementary-School STEM Education and Increasing Participation of Under-Represented Students: Jointly developed a 5th grade robotics course and trained the teachers at the all-girls elementary school in inner-city LA, sponsored by the USC Neighborhood Outreach (UNO) program, Jul 2006-Jun 2007.

High School Outreach Program Participation: Brandeis Summer Odyssey research intern supervisor for: Rabia Belt (went to Harvard), Ilyas Nuri (went to UC Berkeley), Jun-Sep 95. Jisan Research Institute faculty mentor for: Andy Hsieh, Peter Hung, and Elliot Acevedo. K-12 students hosted and trained in the USC Interaction Lab: Spring 2010: Trevor Frese, Ben Shukman, Victor Sherman; Summer 2011: Jacob Copus; Summer 2012: Matthew Silvestre, Colette Speer; Summer 2013: Clara Collier, Katie Gundlach, Aldo Martinez, Denny Min, Rogelio Quintana, Nia Sanchez, Matthew Silvestre, Caroline Spiegel. Engineering Health Academy: Fall 2011-Spring 2012: Kaylee Guzman, Christopher Hernandez, Daniela Raygoza; Fall 2012-Spring 2013: Josephine Duran, Aldo Martinez. Fall 2012-Spring 2013: Rogelio Quintana, Matthew Silvestre, Aldo Martiznez. Fall 2013-Spring 2014: Virginia Chino, Edward Leon, Ashim Nabith, Anthony Sanchez. USC Center for Engineering Diversity program, Summer 2011: Christina Ramsey, David Cox, Carlos Cifuentes, Daniel Flamenco. Summer 2014: Paul Cong, Jeanelle Guardado, Ajmir Khan, Raquel Santizo. Year-round: Ella Wilson (2015-17, went to USC), Drew Sevilla (2017-18); Summer 2019: Ishaan Chandra, Ipek Gokan, Mena Hassan, Josh Huang, Cassandra Jean, Riya Ranjan.

Public Presentations, Demonstrations, and School Assemblies: Annual robotics assembly that became the annual Robotics Family Night at the Monterey Hills Elementary School in South Pasadena (since 2003) involving robotics demonstrations and the involvement of female and male PhD students as role models; keynote talk at the California Science Fair (2008); public talks and testimonials to the entertainment industry about the portrayal of science and STEM (since 2010, see Invited Talks section); multiple events at the World Science Fair in New York City (June 2012); annual USC Robotics Open House (since 2010) hosting over 2000 visitors each year, mostly K-12 students and teachers.

Resources Developed & Established:

Robotics textbook: *The Robotics Primer*, published by MIT Press 2007, continues to be a popular text for K-12 teachers and early university robotics courses. 2nd edition is under development, publication expected in 2024.

Programming workbook: Developed a free robot programming workbook companion for K-12 and university educators and students, available on the web, supported by iRobot Corp. (http://roboticsprimer.sourceforge.net/workbook). Released in Aug 2007.

Web resources: Maintaining an educational resource web portal with materials for K-12 educators and students at: http://robotics.usc.edu/interaction/k-12/

GRANTS, CONTRACTS, and GIFTS (112)

Raised ~ \$77M in research support since 1995.

Current:

- 112. NIH R01 grant for "Personalized AI-Driven Models for Supporting User Engagement and Adherence in Health Interventions: Validation in Cognitive Behavioral Therapy for Anxiety", Maja Matarić (PI), Co-PIs: B. Martins-Klein and S. Nikolaidis, NIH R01MH139134, \$900,000.00 total (Matarić share \$750,000), Aug 1, 2024-July 31, 2027.
- 111. NSF Convergence Accelerator Track H grant for "Determining Community Needs for Accessibility Tools that Facilitate Programming Education and Workforce Readiness for Personas with Disabilities", PI: M. Matarić, Co-PIs: S. Aguilar, S. Liew, G. Ragusa, and J. Thomason, \$750,000 total (Matarić share \$178,393), Dec 15, 2022-Nov 30, 2024.
- 110. NSF HCC Medium grant for "Agent-Facilitated, Video-Mediated Multiparty Interactions in Support Groups", PI: M. Soleymani; co-PI: M. Matarić, L. Miller. \$1,100,000 total (Matarić share \$426,250), Sep 1, 2022-Aug 31, 2026.
- 109. NSF REU Supplement to "NRI: FND: Communicate, Share, Adapt: A Mixed Reality Framework for Facilitating Robot Integration and Customization," PI: M. Matarić, total \$10,750, Apr 30, 2021-Sep 30, 2024.
- 108. NSF National Robotics Initiative (NRI) grant for "NRI: FND: Communicate, Share, Adapt: A Mixed Reality Framework for Facilitating Robot Integration and Customization", PI: M. Matarić, co-PI: D. Krum. \$750,000 total (Matarić share \$550,000), Oct 1, 2019-Sep 30, 2024.
- 107. Undergraduate Research Associated Program (URAP) grant, PI: M. Matarić, total \$8,000 to \$20,000, most years since 2008.

Completed:

106. Subaward "An Accessible Machine Learning-Based ADRD Screening Tool for Families and Caregivers" from U Penn's Alzheimer's Disease Research Center supported by NIH "Penn Artificial Intelligence and Technology Collaboratory for Healthy Aging," NIH Award Number: 5-P30-AG-073105-02, PI: M. Matarić, co-PI: J. Thomason. \$85,000 total. Aug 20, 2022-May 31, 2024.

105. Amazon Research Award, "Learning User Preferences for In-Home Robots Through *In Situ* Augmented Reality", PI: M. Matarić, co-PI: S. Nikolaidis. \$80,000 total. Aug 2022-Jul 2023.

- 104. NSF planning grant "Toward OpenHMI, A Community-Designed Infrastructure for Human-Machine Interaction Research", PI: M. Matarić, co-PI: M. Soleymani. \$100,000 total (Matarić share \$50,000), Aug 1, 2022-Jul 31, 2023.
- 103. Subaward to Advanced Brain Monitoring, Inc. for NIH grant for "Interactive Companion Robot for Preventing Neuro-cognitive Decline in Alzheimer's and Other Dementias", PI: C. Berka, Co-PI: M. Matarić, \$350,000 total (Matarić share \$115,000), Sep 30, 2018-Jan 31, 2023.
- 102. NSF GARDE grant for "Infant-Robot Interaction as an Early Intervention Strategy", PI: B. Smith, co-PI: M. Matarić, \$300,000 total (Matarić share: \$157,856.00), Sep 1, 2017-Aug 30, 2022.
- 101. NSF National Robotics Initiative (NRI) grant for "NRI: Socially Aware, Expressive, and Personalized Mobile Remote Presence: Co-Robots as Gateways to Access to K-12 In-School Education", PI: M. Matarić, co-PI: G. Ragusa. \$600,000, Sep 1, 2015-Aug 31, 2021.
- 100. NSF Computing Research Infrastructure (CRI) grant for "CI-New: Collaborative Research: A Modular Platform for Enabling Computing Research in Intelligent Human-Robot Interaction", PI: M. Matarić, collaborative grant with M. Yim (U Penn PI). \$999,999 total (\$324,334 USC portion), May 1, 2015- May 31, 2021.
- 99. NSF Expedition grant for "Socially Assistive Robotics: An Expedition in Computing," PI: B. Scassellati (Yale U.), collaborative institution PIs: M. Matarić, C. Breazeal (MIT), C. Nass (Stanford). \$10,000,000 total (\$2,575,000 USC portion with Matarić as PI), Apr 1, 2012-Aug 30, 2021.
- 98. NSF Research Experience for Undergraduates (REU) Supplement for "CI-New: Collaborative Research: A Modular Platform for Enabling Computing Research in Intelligent Human-Robot Interaction," PI: M. Matarić, \$12,000 total, Jun 2017-May 31, 2019.
- 97. NSF Research Experience for Undergraduates (REU) Supplement for "NRI: Socially Aware, Expressive, and Personalized Mobile Remote Presence: Co-Robots as Gateways to Access to K-12 In-School Education," PI: M. Matarić, \$8,000 total, Jul 2017-Aug 31, 2019.
- 96. NSF grant for "USC Advanced Content in Computational Engineering and Science Standards for Teachers (USC ACCESS4Teachers): A Research Experience for Teachers Site," PI: M. Matarić, co-PI: G. Ragusa. \$500,000 total, June 1 2014-Nov 30, 2019.
- 95. NSF EAGER grant for "EAGER: Studying the Dynamics of In-Home Adoption of Socially Assistive Robot Companions for the Elderly", PI: M. Matarić, co-PIs: E. Zelinski and S. Wu. \$250,000 total, Sep 15, 2015-Aug 31, 2019.

94. NSF National Robotics Initiative (NRI) collaborative grant for "NRI-Small: Spatial Primitives for Enabling Situated Human-Robot Interaction," PI: M. Matarić, Co-PI: C. Nass (Stanford). \$750,000 total, Aug 1, 2012-July 31, 2018.

- 93. NSF grant for "The 2016 HRI Pioneers Workshop at the 2016 ACM/IEEE International Conference on Human-Robot Interaction," PI: M. Matarić, total \$33,552, Mar 2016-Feb 2017.
- 92. NSF Research Experience for Undergraduates (REU) Supplement for "Socially Assistive Human-Machine Interaction for Improved Compliance and Health Outcomes," PI: M. Matarić, \$16,000 total, Mar 2015-Feb 2016.
- 91. NSF grant for "Socially Assistive Human-Machine Interaction for Improved Compliance and Health Outcomes," PI: M. Matarić. \$400,000 total, Sep 2011-Dec 2016.
- 90. ONR MURI grant for "ANTIDOTE: Adaptive Networks for Threat and Intrusion Detection Or Termination," PI: G. Sukhatme, co-PIs: M. Matarić, M. Veloso, J.Forlizi, and H. Choset (CMU), D. Rus (MIT), and V. Kumar (U Penn), \$1,500,000 total (\$250,000 Matarić portion), May 2009-Dec 2015.
- 89. DARPA STTR Phase II grant with Anthrotronix, Inc. for "Robot Control Design Science," PI: M. Matarić. \$225,000 total, Jul 1, 2013-Dec 30, 2015.
- 88. Provost's Fellowship from the Center for Interdisciplinary Research, "Validating the Core Hypothesis of Assistive Interactive Robotics: An Interdisciplinary Study," PI: M. Matarić, total \$30,000, Apr 2005-Dec 2015.
- 87. NSF HCC-Medium grant for "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, co-PI: S. Narayanan, total \$900,000, (\$450,000 Matarić portion), Aug 2008-July 2015.
- 86. NSF Research Experience for Undergraduates (REU) Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, total \$8,000, May 2013-May 2015.
- 85. National Science Foundation Computing Research Infrastructure (CRI) grant for "Human-Robot Interaction and Socially Assistive Robotics," PI: M. Matarić, total \$130,000, Jul 2007-Jun 2015.
- 84. ONR Defense University Research Instrumentation Program (DURIP) Grant for "Acquisition of a Personal Robotic Platform for DoD-Sponsored Research in Human-Robot Interaction, Motor Control, and Perception," PI: G. Sukhatme, co-PIs: M. Matarić and S. Schaal, \$141,486 total, Jun 2012-Jun 2015.
- 83. NSF Research Experience for Undergraduates (REU) Supplement to "NRI-Small: Spatial Primitives for Enabling Situated Human-Robot Interaction," PI: M. Matarić, total \$8,000, May 2013-Apr 2015.

82. NSF Research Experience for Undergraduates (REU) Supplement for "Socially Assistive Robotics: An Expedition in Computing," PI: M. Matarić, \$8,000 total, May 2013-Apr 2015.

- 81. NSF RET Supplement to "Socially Assistive Human-Machine Interaction for Improved Compliance and Health Outcomes," PI: M. Matarić, total \$10,000, Aug 2013-Aug 2014.
- 80. NSF grant for "NSF Smart Health and Wellbeing PI Meeting," PI: M. Matarić, total \$65,500, Jun 2013–Dec 2013.
- 79. USC CTSI Multidisciplinary Research Project Pilot Award "Active NAO! Combating Childhood Obesity with Robot Companions", PI: D. Spruijt-Metz, co-PI: M. Matarić, \$50,000 direct costs, Mar 1, 2013-Jun 30, 2014.
- 78. NSF grant for "Societally Relevant Engineering Technologies Research: A Research Experience for Teachers (RET) Site," PI: M. Matarić, co-PI: G. Ragusa. \$300,000 total (\$125,000 Matarić portion), May 2010-April 2014.
- 77. Google CS4HS grant for "Computational Thinking and Robotics for High School Workshop", PI: G. Ragusa, co-PI: M. Matarić, \$15,000 total, Apr 1013-May 2014.
- 76. DARPA STTR Phase I grant with Anthrotronix, Inc. for "Robot Control Design Science," PI: M. Matarić. \$35,000 total, Nov 1, 2012-Oct 31, 2013.
- 75. Intelligent Automation, Inc. subcontract to DoD grant for "PATRICIA: A Personal Affective Therapist for Rehabilitation of Individuals with Cognitive Impairments." PI: M. Matarić, \$150,000 total, Jan 2011-Jan 2014.
- 74. NSF Research Experience for Teachers (RET) Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, total \$10,000, May 2012-May 2013.
- 73. NSF Research Experience for Undergraduates (REU) Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, total \$16,000, May 2012-May 2013.
- 72. NSF RET Supplement to "Socially Assistive Human-Machine Interaction for Improved Compliance and Health Outcomes," PI: M. Matarić, total \$3,000, May 2012-May 2013.
- 71. NSF REU Supplement to "Socially Assistive Human-Machine Interaction for Improved Compliance and Health Outcomes," PI: M. Matarić, total \$16,000, May 2012-May 2013.
- 70. Provost's Fellowship from the USC Center for Interdisciplinary Research, PI: M. Matarić, total \$50,000, Aug 2002-Jul 2012.
- 69. NSF grant "New GK-12: BE-LA: Body Engineering Los Angeles, PI: K. Nayak, co-PIs: A.

- Hodge, G. Ragusa, M. Matarić, total \$1,335,321. Aug15, 2011-Jul 31, 2016.
- 68. AnthroTronix, Inc. subcontract to NIDRR grant for "Using Robotics to Promote Social Cognitive Skills in the Inclusive Classroom," PI: M. Matarić, total \$15,000. Feb 2011-Jul 2011.
- 67. National Science Foundation Human-Robot Interaction Program grant for "Personalized Assistive Human-Robot Interaction: Validation in Socially-Assisted Post-Stroke Rehabilitation," PI: M. Matarić, co-PI: C. Winstein, total \$450,000, Sep 2007-Aug 2012.
- 66. Robert Wood Johnson Foundation grant for "Using a Physical and Virtual Robots to Increase the Effectiveness of Health Games to Encourage Physical Activity," PI: M. Matarić, total \$150,000, Sep 2009-Aug 2011.
- 65. NSF Research Experience for Teachers (RET) Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, total \$16,000, May 2011-May 2012.
- 64. Dan Marino Foundation grant through the Marino Autism Research Institute (MARI) for "Socially Assistive Robotics for Children with Autism Spectrum Disorders," PI: M. Matarić, total \$50,000, Jan 2010.
- 63. NSF RET Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, total \$650, May 2009-May 2010.
- 62. NSF REU Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, total \$16,000, May 2009-May 2010.
- 61. NSF RET Supplement to "Personalized Assistive Human-Robot Interaction: Validation in Socially-Assisted Post-Stroke Rehabilitation," PI: M. Matarić, total \$10,000, May 2011-May 2012.
- 60. NSF REU Supplement to "Personalized Assistive Human-Robot Interaction: Validation in Socially Assisted Post-Stroke Rehabilitation," PI: M. Matarić, total \$8,000, May 2011-April 2012.
- 59. NSF RET Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, total \$6,000, May 2009-May 2010.
- 58. NSF RET Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, total \$800, May 2009-May 2010.
- 57. NSF RET Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," USC PI: M. Matarić, total \$10,000, May 2010-May 2011.
- 56. NSF RET Supplement to "Personalized Assistive Human-Robot Interaction: Validation in Socially-Assisted Post-Stroke Rehabilitation," PI: M. Matarić, total \$8,00, May 2010-May 2011.

55. NSF REU Supplement to "Personalized Assistive Human-Robot Interaction: Validation in Socially-Assisted Post-Stroke Rehabilitation," PI: M. Matarić, total \$8,000, May 2010-Apr 2011.

- 54. NSF REU Supplement to "Personalized Socially-Assistive Human-Robot Interaction: Applications to Autism Spectrum Disorder," PI: M. Matarić, total \$8,000, May 2010-May 2011.
- 53. NSF RET Supplement to NSF Dynamics of Human Behavior "Modeling and Analyzing Individual and Collective Human Spatial Behavior," collaborative grant, USC PI: M. Matarić, total \$6,000, May 2009-May 2010.
- 52. NSF RET Supplement to "Personalized Assistive Human-Robot Interaction: Validation in Socially-Assisted Post-Stroke Rehabilitation," PI: M. Matarić, total \$10,000, May 2009-May 2010.
- 51. NSF REU Supplement to "Personalized Assistive Human-Robot Interaction: Validation in Socially-Assisted Post-Stroke Rehabilitation," PI: M. Matarić, total \$6,000, May 2009-Apr 2010.
- 50. Autism Speaks Foundation grant for "Robotics and Speech Processing Technology for the Facilitation of Social Communication Training in Children with Autism," PI: S. Narayanan, co-PIs: M. Matarić, M. Kipke, P. Mundy, and M. Williams, total \$200,000, Sep 2008-Aug 2010.
- 49. LA Basin Clinical and Translational Science Institute, Pilot Grant for "Evaluating the Effectiveness of Social Robotics for Enhancing DIR/Floortime Therapy for Children with Autism Spectrum Disorder," PI: M. Matarić, co-PIs: S. Narayanan, P. Mundy, and C. Lajonchere, total \$50,000, Sep 2008-Jun 2010.
- 48. National Academies Keck Futures Initiative (NAKFI), "Socially Assistive Robotics for the Physical and Cognitive Healthspan," PI: M. Matarić, co-PI: C. Finch, total: \$75,000, Jun 2008-Mar 2010.
- 47. DARPA LANdroids Program, "Task Control Software for Networked Robot Teams," subcontract to Intelligent Automation, PI: M. Matarić, total \$470,000, Phase I, Feb 2008-Dec 2010, Phase II Jan 2010-Dec 2011.
- 46. National Science Foundation grant for "Major Research Infrastructure," PI: S. Schaal, Co-PI: M. Matarić, S. Sukhatme and L. Itti, total \$600,000 + \$200,000 university cost-share, Sep 1, 2006 Aug 31, 2010.
- 45. NSF Dynamics of Human Behavior "Modeling and Analyzing Individual and Collective Human Spatial Behavior," collaborative grant, USC PI: M. Matarić, co-PI K. Lerman, Brandeis PI: R. Sekuler, total \$750,000, USC part: \$465,000, Sep 2005-Aug 2009.
- 44. Nancy Lurie Marks Family Foundation grant, for "Socially Assistive Robotics for Socialization and Communication Training of Children with Autism," PI: M. Matarić, total \$99,804, Jan-Jun 2009.

43. NSF REU Supplement to NSF Dynamics of Human Behavior "Modeling and Analyzing Individual and Collective Human Spatial Behavior," collaborative grant, USC PI: M. Matarić, total \$6,000, May 2008-May 2009.

- 42. NSF RET Supplement to ITR Computing Research Infrastructure grant for "Human-Robot Interaction and Socially Assistive Robotics," PI: M. Matarić, total \$10,000, Jun 2008-May 2009.
- 41. NSF REU Supplement to "Personalized Assistive Human-Robot Interaction: Validation in Socially-Assisted Post-Stroke Rehabilitation," PI: M. Matarić, total \$6,000, May 2008-Apr 2009.
- 40. NSF RET Supplement to "Personalized Assistive Human-Robot Interaction: Validation in Socially-Assisted Post-Stroke Rehabilitation," PI: M. Matarić, total \$10,000, May 2008-Apr 2009.
- 39. National Institute for Aging pilot project "Assessing Socially Assistive Robotics as Social and Cognitive Aides for the Elderly," PI: M. Matarić, total \$43,000, Jun 2007-Mar 2008.
- 38. Okawa Foundation Grant, PI: M. Matarić, total \$10,000, Oct 2004-May 2008.
- 37. NSF IIS Grant for "Automatic Synthesis and Optimization of Controllers for Multi-Robot Coordination," PI: K. Lerman, Co-PI: M. Matarić, co-PI portion \$195,000, Nov 2004-Oct 2007.
- 36. Microsoft Research Gift for "Robotics for K-12 Education and Outreach," PI: M. Matarić, total \$15,000, Jun 2006.
- 35. NSF grant for "NSF Workshop on Human-Robot Interaction," PI: M. Matarić, co-PI G. Sukhatme and S. Schaal, total \$49,995, Aug 1, 2006 Jul 31, 2008.
- 34. USC Neighborhood Outreach (UNO) Grant for "Hands-on Robotics for Enhancing Elementary-School STEM Education and Increasing Participation of Under-Represented Students," PI: M. Matarić, total \$24,424, Jul 2006-Jun 2007.
- 33. USC Provost's Fund for Innovative Undergraduate Teaching grant for "Science and Systems: Engineering Through Robotics," a freshman hands-on all-engineering course, PI: M. Matarić, total \$15,000, May 2006-Apr 2007.
- 32. NSF Dynamics of Human Behavior Grant for "Modeling and Analyzing Individual and Collective Human Spatial Behavior," REU supplement, PI: M. Matarić, total \$6,000, summer 2006.
- 31. NSF IIS Grant for "Automatic Synthesis and Optimization of Controllers for Multi-Robot Coordination," REU supplement, PI: M. Matarić, total \$6,000, summer 2006.
- 30. USC Provost's Arts and Humanities Initiative Grant for "Capturing Movement in Time and Space: Dance and Motion Capture," PIs: M. Apostolos and M. Matarić, total \$43,000, May 2006-May 07.

29. JPL-USC Strategic University Research Partnership Director's Research and Development Fund (DRDF) Grant for "Adaptive Human-Machine Interfaces for Collaborative Construction," JPL PI: T. Huntsberger, USC part: \$20,000, Sep 2005-Aug 06.

- 28. ONR MURI for "Human Activity Recognition From a Network of Vision Sensors," PI: J. Malik (UCB), co-PIs: C. Bregler (NYU), J. Canny (UCB), D. Forsyth, M. Jordan (UCB), M. Matarić (USC), P. Perona (Caltech), S. Russell (UCB). USC portion \$352,422, May 2001-Aug 2006.
- 27. USC UNO Grant "Hands-on Robotics for Enhancing Middle-School STEM Education and Increasing Participation of Under-Represented Students," PI: M. Matarić, total \$29,362, Jul 2005-Jun 2006.
- 26. USC Institute for Creative Technologies, "Foundations of Human-Robot Interaction: Study of Embodiment, Body Language, and Interaction," PI: M. Matarić, total \$150,000, Nov 2005.
- 25. NSF Grant for Travel Support for IEEE ICRA-05, PI: M. Matarić, \$46,000, Dec 2004-Nov 2005.
- 24. NSF ITR Grant for "Active Sensor Networks with Applications to Marine Microorganism Monitoring," PI: A. Requicha, Co-PIs: D. Caron, D. Estrin (UCLA), M. Matarić, G. Sukhatme, total \$1,500,000, Sep 2001-Aug 2005.
- 23. NSF RET Supplement to ITR Grant for "Active Sensor Networks with Applications to Marine Microorganism Monitoring," PI: M. Matarić, total \$20,000, Jul 2003-Aug 2005.
- 22. DOE RIM Grant for "Multi-Robot Learning in Tightly-Coupled, Inherently Cooperative Tasks," PI: M. Matarić, Co-PI: G. Sukhatme, total \$600,000, Aug 2001-Aug 2005.
- 21. DARPA Grant for "Software for Distributed Robotics," Software for Distributed Robotics (SDR) Program, PI: G. Sukhatme, co-PIs: M. Matarić and M. Tambe, total \$400,000, Jul 2002-Feb 2004.
- 20. DARPA Grant for "Acquisition of Autonomous Behaviors by Robotic Assistants," MARS Robotic Vision 2020 Program, PI: M. Matarić, total \$250,000, Jul 2002-Jul 2004.
- 19. DARPA Grant for "Heterogeneous Small-Team Behaviors for Mobile Robots in Outdoor Environments," MARS Robotic Vision 2020 Program, PI: G. Sukhatme, co-PI: M. Matarić, total \$1,120,000, Jul 2002-Jul 2004.
- 18. Women in Science and Engineering (WiSE) Supplemental Research Grant, PI: M. Matarić, \$2,500, 2001-2002 AY.
- 17. DARPA Grant for "Primitive-Based Humanoid Control," PI: M. Matarić, total \$500,000, Dec 2000-Aug 2004.

16. NSF Grant for "Dynamic Adaptive Wireless Networks with Autonomous Robot Nodes," PI: D. Estrin, co-PIs: R. Govindan, J. Heidemann, M. Matarić, and G. Sukhatme, total \$900,000, Sep 2000-Sep 2004.

- 15. DARPA Grant for "Mathematical Modeling of Large Multi-Agent Systems" (TASK), PI: K. Lerman (ISI), co-PI: M. Matarić, total \$1,576,625, Aug 2000-Jul 2005.
- 14. ONR Defense University Research Instrumentation Program (DURIP) Grant for "Equipment Support for Dynamic adaptive Wireless Networks with Autonomous Robot Nodes," PI: D. Estrin, co-PIs: M. Matarić and G. Sukhatme, total \$320,388, Apr 2000-Jun 2003.
- 13. NASA Grant for "Multi-Robot Coordination in Planar Manipulation Tasks," \$40,000, Feb-Dec 2000.
- 12. Sandia National Labs Grant for "Characterizing Emergent Group Behavior in Robots Using Statistical Methods," PI: M. Matarić, total \$100,000, Jan-Dec 2000.
- 11. USC Center for Excellence in Teaching, for "A Hands-On Introduction to Robotics Using LEGO Robot Kits," PI: M. Matarić, \$2,500, Sep 99-Aug 2000.
- 10. NSF Grant for "Dynamic Adaptive Wireless Networks with Autonomous Robot Nodes," PI: D. Estrin, co-PIs: G. Bekey, R. Govindan, M. Matarić, G. Sukhatme, total \$498,268, Sep 1999-Sep 2000.
- 9. DARPA Grant for "A Software Framework for Reliable, Adaptive, Autonomous Robots in Dynamic Unstructured Environments," Mobile Autonomous Robot Software (MARS) Program, PI: G. Sukhatme, co-PIs: M. Matarić and G. Bekey, total \$2,321,109, July 1999-Aug 2004.
- 8. Office of Naval Research (ONR) Grant for "Biologically-Inspired Methods for Adaptive Group Coordination," PI: M. Matarić, total \$180,000, Jan 1999-Dec 2001.
- 7. NASA Supplementary Equipment Grant for "Neurotechnology-Based Multi-Agent Systems," PI: M. Matarić, total \$18,835, Sep 98-Aug 99.
- 6. DARPA Grant for "TEAMCORE: Rapidly Extending and Building Agents to Form Robust Adaptive Teams," PI: M. Tambe, co-PIs: M. Matarić and W-M. Shen, total \$2,000,000, Jun 98-01.
- 5. DARPA Contract for "Robust Tactical Mobile Robot Systems With Distributed Intelligence (TMR)," PI: G. Bekey, co-PIs: M. Matarić and G. Sukhatme, total \$750,000, Jun 98-May 00.
- 4. DARPA Contract for "Intelligent Taskable System Colonies with Learning for Small Unit Operations," PI: G. Bekey, co-PIs: M. Matarić, G. Sukhatme, total \$998,000, May 97-00.

3. NSF CAREER Grant for "Using Imitation to Study Multi-Representational Systems," PI: M. Matarić, total \$213,656, May 1996-Aug 2002.

- 2. NSF Research Infrastructure Grant for "Acquisition of Research Infrastructure for Autonomous Robotics," co-PI with J. Pollack, total \$225,500, Sep 1995-Aug 98.
- 1. ONR Grant for "Automated Synthesis of Multi-Agent Control," PI: M. Matarić, total \$375,000, Mar 1995-Apr 98.

HONORS AND AWARDS

ACM Athena Lecturer Award 2024-	2025	
Fellow, National Academy of Arts and Sciences	2023	
	2021	
ACM Distinguished Speaker 2021-pr	esent	
Distinguished Professor, USC	2019	
Fellow, Association for the Advancement of Artificial Intelligence (AAAI)	2017	
Communication and Leadership Award, Toastmasters International Founder's District	2016	
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USC Remarkable Woman Award	2010	
USC Mellon Mentoring Award	2009	
	2009	
	2007	
Woman of the Year, Valley Sunset District Business and Prof. Women Organization 2007		
Best Poster Presentation Award IEEE RO-MAN (with J. Wainer, D. Feil-Seifer, D. Shell)2007		
J 11	2006	
USC Innovative Undergraduate Teaching Award 2006-	2007	
\mathcal{E}	2005	
Okawa Foundation Grant	2004	
Ambassador to the USC President 2001-02, 2004-	2010	
USC Provost's Fellowship from the Center for Interdisciplinary Research 2002-	2003	
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$\mathcal{C}_{\mathcal{I}}$	1999	
USC Innovative Undergraduate Teaching Award 1999-	2000	
1 6	1999	
NSF CAREER Grant 1996-		
Brandeis University Nominee for the Packard Foundation Fellowship	1995	

Sigma Xi	1993-2003
GE Foundation Faculty for the Future Fellowship	1990-1991
NCR Graduate Engineering Fellowship	1987-1988
Adolph J. Spangler Scholarship	1986-1987
Phi Kappa Phi Honors Society	1986
Pi Beta Phi Scholarship	1986
W. R. Gregory and E. V. Berger Scholarship	1985
State of Kansas Scholarship	1983-1986

SELECTED MEDIA COVERAGE

Print and Web:

- "Socially Assistive Robotics with Maja Matarić", *Possible*, technology podcast by Reid Hoffman, Mar 13, 2023.
- "Dream Machine", Alla Katsnelson, Science, Feb 10, 2022.
- "COVID-19 May Have Rewired People's Relationships with AI Forever", Sofia Quaglia, *The Observer*, Apr 21, 2021.
- "Ever Wonder if Robots Can Have Personalities?", Perry Roth-Johnson, California Science Center, Oct 28, 2020.
- "Meet the Robots", cover story, National Geographic, Sep 2020.
- "Socially Assistive Robots Hold Promise in Ways Both Conventional and Unimagined", Haisten Willis, *Diversity in Action*, Sep/Oct 2020.
- "Robots Aren't Taking Over the World, They're Teaching Kids With Autism Social Skills", Alma Fabiani, *Screen Shot*, Mar 11, 2020.
- "Children With Autism Saw Their Learning and Social Skills Boosted After Playing With This AI Robot", Kashmira Gander, *Newsweek*, Feb 27, 2020.
- "Robots That Teach Autistic Kids Social Skills Could Help Them Develop", Karen Kao, *MIT Technology Review*, Feb 26, 2020.
- "World Wise Web Episode 2: Socially Assistive Robots", Tamsin Barber, *BBC News*, Jan 18, 2020.
- "Socially Assistive Robots", World Wise Web, BBC World Service, Jan 18, 2020.
- "How to Build Robots People Can Relate To", Maja Matarić, *The Wall Street Journal*, Oct 14, 2019.
- "The Pransky Interview: Dr. Maja Matarić, Professor, University of Southern California; Pioneer, field of Socially assistive robotics; co-founder of Embodied", Joanne Pransky, *Industrial Robotics*, May 20, 2019.
- "Countdown to Big Data in Precision Health: Robots That Are Here to Help", Hanae Armitage, *Stanford Medicine*, Apr 8, 2019.
- "How Social Robots Could Help Older Patients Help Themselves", Randy Rieland, *Next Avenue*, Apr 1, 2019.
- "Science Nation: Socially Assistive Robots for Children on the Autism Spectrum", Miles O'Brien and Kate Tobin, *Science Nation*, *National Science Foundation*, Oct 29, 2018.
- "For the Elderly Who are Lonely, Robots Offer Companionship", Imani Moise, *The Wall Street Journal*, May 28, 2018.

- "Killer Robots, Begone! This Doctor's Androids Come in Peace", S.C. Stuart, *PC Magazine*, Apr 5, 2018.
- "Socially Assistive Robots", Audrow Nash, Robohub, Mar 19, 2018.
- "On Robots that Care", New York Times, Feb 20, 2018.
- "People of ACM", Communications of the ACM, Nov 28, 2017.
- "Robot Companions Are Just What the Doctor Ordered", Abrar Al-Heeti, CNET, Nov 20, 2017.
- "AI Matters: Getting to Know Maja Matarić", ACM SIGAI, Aug 29, 2017.
- "Socially Assistive Robots Help Patients Make Behavioral Changes", Jennifer Abbasi, JAMA *Medical News*, June 7, 2017.
- "Socially Assistive Robots Could Make You Healthier, Not Jobless", Glenn McDonald, Seeker.com, March 15, 2017.
- "A future with robots as companions could be closer than you think", Ian Chaffee, *USCNews*, March 10, 2017.
- "Robot Researchers Not Trying to Replicate People", Don Clark, *The Wall Street Journal*, Oct 26, 2016.
- "Why robots must explain, listen, and ask for help", Hope Reese, TechRepublic, May 24, 2016.
- "How Robot Therapists can Fill a Gap in Health Care", Harriet Taylor, Jeniece Pettitt, CNBC, Jul 21, 2016.
- "10 Up-and-Coming LA Innovators to Watch", Los Angeles Times, Aug 2, 2015.
- "Socially Assistive Robots Help Kids With Autism Learn by Providing Personalized Cues", *Science Daily*, Aug 28, 2014.
- "Can a Robot be Too Nice", Leon Neyfakh, Boston Globe, Aug 15, 2014.
- "Learning About Technology From Robotics", Julie Bobrow, Huffington Post, Jul 9, 2014.
- "Top 10 Influential Female Engineers", Design News, May 20, 2014.
- "A Swiveling Proxy That Will Even Wear a Tutu", Robbie Brown, New York Times, Jun 7, 2013.
- "Robot Experiment Coming to Los Angeles Classrooms", NPR AirTalk with Larry Mantle interview, Apr 12, 2013.
- "Robots May Help Kids with Special Needs", Robotics Business Review, Apr 18. 2013.
- "The 25 Most Powerful Women Engineers in Tech", Julie Bort, Business Insider, Mar 5, 2013.
- "Talking Robots Play Part in Therapeutic Treatment for People With Special Needs", *PBS News Hour with Ray Suarez*, PBS News, Jan 9, 2013.
- "Could Robots be Our Future Caregivers?", NPR AirTalk interview, Dec 28, 2012.
- "Coming Soon to a Kindergarten Classroom: Robot Teachers", Slate, Aug 6, 2012
- Cool Jobs: Wide world of robots, Science News for Kids, May 9, 2012.
- "Recipe for a Robot: What It Takes to Make a Social Robot", Kavli Foundation, Jan 2012.
- "The Social Roboticist", Nature, Aug 16, 2012
- "Wanted: Coach, Companion, Robot", The Atlantic, April 17, 2012
- "University of Southern California Researchers Developing Robot to Help Stroke Victims", *ASEE First Bell*, Apr 13, 2012
- "Robots built to help autistic children", Chris Woolston, Los Angeles Times, Oct 17, 2011.
- "Grandma's new friend is wired", Karen Ravn, Los Angeles Times, Oct 17, 2011.
- "The nuts and bolts of new robots", Karen Ravn, Los Angeles Times, Oct 17, 2011.
- "What's in a Face?", Cynthia Graber, Ask Magazine, Sep/Oct issue 2011.
- Robotics Rocks!, April Garbuz, TalkingScience.org, August 19, 2011.
- "Robots Spark Social Play in Children with Autism", Simons Foundation Autism Research Initiative interview by V. Hughes, Dec 2010.

- "Students, Meet Your New Teacher, Mr. Robot," B. Carey and J. Markoff, *New York Times*, Jul 10, 2010.
- "The New Face of Autism Therapy," G. Mone, Popular Science, May 2010.
- "Robots to Fight Autism," V. Wang, *Popular Science*, Apr 2010.
- "Caregiver Robot: A scientist creates robots that help children," S. Karlin, *IEEE Spectrum*, Feb, 2010.
- LA Visionaries, Los Angeles Times Magazine, Jan 3, 2010.
- "Robots That Care: Advances in Technological Therapy," J. Groopman, *The New Yorker*, Nov 2, 2009
- "I'm Here To Make You Feel Better," *The Washington Post*, Mar 10th, 2009.
- "Robot Playmates Help Autistic Kids With Social Skills," The Washington Post, Aug 7th, 2008.
- "Robots Aid Stroke Victims, Autistic Kids," S. Borenstein, Salon.com, Nov 22, 2006.
- "A good robot has personality but not looks," C. Biever, New Scientist, issue 2561, Jul 20, 2006.
- "The Art of Building a Robot to Love," H. Fountain, The New York Times, Mar 5, 2006.
- "Robot science puts on a friendly face," USA Today, E. Baig, May 1, 2003.
- "Space Repairman," Technology Review, by G. Huang, May 2003

TV, Radio, & Movies:

RealTalk MS with Jon Strum, "Robots & Rehabilitation with Dr. Matarić", Jan 23, 2018.

KCET Town Hall with Val Zavala, "Robots that Care with Maja Matarić", 2017.

NPR Air Talk with Larry Mantle, "Robot Experiment Coming to LA Classrooms", Apr 12, 2013.

PBS News Hour with Ray Suarez, "Talking Robots Play Part in Therapeutic Treatment for People with Special Needs", Jan 9, 2013.

KPCC Air Talk, "Could Roboys be our Future Caregivers?" Dec 28, 2012.

Discovery Channel, Prophets of Science Fiction Season 1, Ep. 5 "Isaac Asimov", Feb 15, 2012.

BBC News, "Ready for the robot revolution?" Jon Stewart, Oct 2, 2011.

BBC News, "Robots going social", Jon Stewart, Sep 30, 2011.

BBC News, "Training by a robot gym instructor", Jon Stewart, Sep 30, 2011.

ABC News "Robots Used to Help Children with Autism", Mikaela Conley, Oct 20, 2011.

CNN, interview with Roy Marciano, Nov 10, 2010.

BBC Radio "Digital Planet," by J. Stewart. Jun 4th, 2010.

NBC Today Show, "Autism: Breaking Barriers." Apr 15th, 2009.

CNN Headline News, "Learning Robotics." Aug 25, 2008.

Me & Isaac Newton, Emmy-nominated documentary feature film by Michael Apted, featured 7 scientists: Nobel Laureate Gertrude Elion, Ashok Gadgil, Michio Kaku, Maja Matarić, Steven Pinker, Karol Sikora, and Patricia Wright.

ABC Evening News, M. Hernandez, Jun 27, 2001.

Scientific American Frontiers hosted by Alan Alda, "Natural Born Robots," Nov 2, 1999.

ABC World News Tonight with Peter Jennings, May 5, 1999.

PUBLICATIONS

Books

Matarić, Maja J., The Robotics Primer, MIT Press, 2007. 2nd edition in press.

Refereed Journal Articles (82)

82. Nathaniel Dennler, Mina Kian, Stefanos Nikolaidis, **Maja Matarić**. "Designing Robot Identity: The Role of Voice, Clothing, and Task on Robot Gender Perception." *International Journal of Social Robotics. In press*.

- 81. Lawrence HR, Schneider RA, Rubin SB, **Maja J Matarić**, McDuff DJ, Jones Bell M, "The Opportunities and Risks of Large Language Models in Mental Health", *JMIR Mental Health*, Vol 11, July 2024.
- 80. Massimiliano Nigro, Amy O'Connell, Thomas Groechel, Anna Maria Velentza, and **Maja J Matarić**, "An Interactive Augmented Reality Interface for Personalized Proxemics Modeling", *IEEE Robotics and Automation Magazine (IEEE-RAM)*, 2024.
- 79. Nathaniel S. Dennler, Changxiao Ruan, Jessica Hadiwijoyo, Brenna Chen, Stefanos Nikolaidis and **Maja J. Matarić**. "Design Metaphors for Understanding User Expectations of Socially Interactive Robot Embodiments". *Transactions on Human-Robot Interaction*, to appear in 2023.
- 78. Arvin Hekmati, Mitul Luhar, Bhaskar Krishnamachari, **Maja Matarić**. "Simulating COVID-19 classroom transmission on a university campus", *Proceedings of the National Academy of Sciences*, Vol. 119, No. 22, 10.1073/pnas.2116165119, May 24, 2022.
- 77. Micol Spitale, Sarah Okamoto, Mahima Gupta, Hao Xi, **Maja J Matarić**. "Socially Assistive Robots as Storytellers That Elicit Empathy", *ACM Transactions on Human-Robot Interaction (THRI)*, Vol. 11, No. 4, doi: 10.1145/3558409, pp 1-29, Dec 2022.
- 76. Zhonghao Shi, Thomas R. Groechel, Shomik Jain, Kourtney Chima, Ognjen Rudovic and **Maja J. Matarić**. "Toward Personalized Affect-Aware Socially Assistive Robot Tutors in Long-Term Interventions for Children with Autism", *Transactions on Human-Robot Interaction (THRI)*, Vol. 11, No. 4, doi: 10.1145/3526111, pp 1-28, Dec 2022.
- 75. Andrew Specian, Ross Mead, Simon Kim, **Maja J. Matarić** and Mark Yim. "Quori: A Community-Informed Design of a Socially Interactive Humanoid Robot", *IEEE Transactions on Robotics*, doi: 10.1109/TRO.2021.3111718, pp 1-18, Oct 17, 2021.
- 74. Henrik Christensen, Nancy Amato, Holly Yanco, **Maja Matarić**, Howie Choset, Ann Drobnis, Ken Goldberg, Jessy Grizzle, Gregory Hager, John Hollerbach, Seth Hutchinson, Venkat Krovi, Daniel Lee, Bill Smart and Jeff Trinkle, "A Roadmap for US Robotics From Internet to Robotics 2020 Edition", *Foundations and Trends in Robotics*, Vol (8): 4, pp 307-424, 2021.
- 73. Naomi T. Fitter, Rebecca Funke, José Carlos Pulido, **Maja J. Matarić** and Beth A. Smith. "Toward predicting infant developmental outcomes from day-long inertial motion recordings", In *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 28(10):2305-2314, Oct 2020.
- 72. Jain, Shomik, Balasubramanian Thiagarajan, Balasubramanian, Shi, Zhonghao, Clabaugh, Caitlyn, and **Matarić, Maja J.**, "Modeling Engagement in Long-Term, In-Home Socially

Assistive Robot Interventions for Children with Autism Spectrum Disorders", *Science Robotics*, Vol(5):39, Feb 26, 2020.

- 71. Trost, Margaret, Chrysilla, Grace, Gold, Jeffrey I. and **Matarić**, **Maja J.**, "Socially-assistive robots using empathy to reduce pain and distress during peripheral IV placement in children". *Pain Research and Management*, Vol(2020), Article 793521, Apr 2020.
- 70. Fitter, Naomi, T. N. Raghunath, N., Cha, Sanchez, Elizabeth C. A., Takayama, Leila, and **Matarić**, **Maja J.**, "Are We There Yet? Comparing Remote Learning Technologies in the University Classroom", *IEEE Robotics and Automation Letters (RA-L)*, 5(2):2706-2713, 2020.
- 69. Fitter, Naomi, Funke, Rebecca, Pulido, Jose Carlos, **Matarić, Maja J.**, and Smith, A. Beth, "Toward Predicting Infant Development Outcomes from Day-Long Intertial Motion Recordings", *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, Aug 17, 2020.
- 68. **Matarić, Maja J**., "How to Build Robots People Can Relate To", *The Wall Street Journal*, Nov 13, 2019.
- 67. Clabaugh, Caitlyn E., Mahajan, Kartik, Jain, Shomik, Pakkar, Roxanna, Becerra, David, Shi, Zhonghao, Deng, Eric, Lee, Rhianna, Ragusa, Gisele, and **Matarić, Maja J**., "Long-Term Personalization of an In-Home Socially Assistive Robot for Children with Autism Spectrum Disorders", *Frontiers in Robotics and AI*, Human-Robot Interaction Section, Manuscript ID: 479439, Nov 5, 2019.
- 66. Trost, Margert J., Ford, Adam R., Kysh, Lynn, Gold, Jeffrey I., and **Matarić, Maja J.**, "Socially Assistive Robotics for Helping Pediatric Distress and Pain: A Review of Current Evidence and Recommendations for Future Research and Practice", *The Clinical Journal of Pain*, May 2019, 35(5):451-458.
- 65. Clabaugh, Caitlyn, and **Matarić**, **Maja J**., "Escaping Oz: Autonomy in Socially Assistive Robotics", Annual Review of Control, Robotics, and Autonomous Systems, 2:33-61, 2019.
- 64. Fitter, Naomi T., Funke, Rebecca, Pulido, Jose Carlos, Eisenman, Lauren, Deng, Weiyang, Rosales, Marcelo, Bradley, Nina S., Sargent, Barbara, Smith, Beth A., and **Matarić, Maja J.**, "Socially Assistive Infant-Robot Interaction: Using Robots to Encourage Infant Leg Motion Training", *IEEE Robotics and Automation Magazine*, 2019.
- 63. Deng, Eric C. Deng, Mutlu, Bilge, and **Matarić**, **Maja J**., "Embodiment in Socially Interactive Robots". In *Foundations and Trends in Robotics*, 7(4):251-356, Jan 2019.
- 62. Clabaugh, Caitlyn and **Matarić**, **Maja J**., "Robots for the People, by the People: Personalizing Human-Machine Interaction", *Science Robotics*, 3, August 22, 2018.
- 61. Cha, Elizabeth, Kim, Yunkyung, Fong, Terrence, and **Matarić**, **Maja J**. "A Survey of Nonverbal Signaling Methods for Non-Humanoid Robots", in *Foundations and Trends in Robotics*, 6(4): 211-323, 2018.

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- 58. Koenig, Nathan and **Matarić, Maja J.**, "Robot Life-Long Task Learning from Human Demonstrations: A Bayesian Approach", *Autonomous Robots*, 40(6):1-16, Jul 2016.
- 57. Mead, Ross and **Matarić**, **Maja J**., "Autonomous human-robot proxemics: socially aware navigation based on interaction potential". *Autonomous Robots*, 1-13, DOI: 10.1007/s10514-016-9572-2, Jun 2016.
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- 28. Howard, Andrew, **Matarić**, **Maja J.**, and Sukatme, Gaurav S., "Localization for Mobile Robot Teams: A Maximum Likelihood Approach." Institute for Robotics and Intelligent Systems Technical Report IRIS-01-407, 2001.
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- 24. Gerkey, Brian and **Matarić**, **Maja J.**, "Sold! Market methods for multi-robot control," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-01-399, Mar 2001.

23. Ostergaard, Esben, Sukhatme, Gaurav S., and **Matarić, Maja, J.**, "Emergent Bucket Brigading - A simple mechanism for improving performance in multi-robot constrained-space foraging tasks." Institute for Robotics and Intelligent Systems Technical Report IRIS-01-398, 2001.

- 22. Fredslund, Jakob and **Matarić**, **Maja J.**, "A General, Local Algorithm for Robot Formations," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-01-396, Mar 2001.
- 21. Nicolescu, Monica and **Matarić, Maja J.**, "Learning and Interacting in Human-Robot Domains," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-01-395, Jan 2001.
- 20. Nicolescu, Monica and **Matarić, Maja J.**, "Extending Behavior-Based Systems Capabilities Using An Abstract Behavior Representation," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-00-389, Aug 2000.
- 19. Goldberg, Dani and **Matarić, Maja J.**, "Robust Behavior-Based Control For Distributed Multi-Robot Collection Tasks," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-00-387, 2000.
- 18. Billard, Aude and **Matarić, Maja J.**, "Learning human arm movements by imitation: Evaluation of a biologically inspired connectionist architecture," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-00-386, 2000.
- 17. Jenkins, Odest C. and **Matarić**, **Maja J.**, "Primitive-Based Movement Classification for Humanoid Imitation," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-00-385, 2000.
- 16. Pomplun, Marc and **Matarić, Maja J.**, "Evaluation Metrics and Results of Human Arm Movement Imitation," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-00-384, 2000.
- 15. Goldberg, Dani and **Matarić**, **Maja J.**, "Detecting Regime Changes with a Mobile Robot using Multiple Models," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-00-382, 2000.
- 14. Werger, Barry, B. and **Matarić**, **Maja J.**, "Exploiting Embodiment in Multi-Robot Teams," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-99-378, 1999.
- 13. **Matarić**, **Maja J.**, "Sensory-Motor Primitives as a Basis for Imitation: Linking Perception to Action and Biology to Robotics," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-99-377, 1999.
- 12. Sukhatme, Gaurav S., Montgomery, James F., and **Matarić, Maja J.**, "Design and Implementation of a Mechanically Heterogeneous Robot Group," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-99-372, 1999.

11. Goldberg, Dani and **Matarić, Maja J.**, "Augmented Markov Models," *USC Institute for Robotics and Intelligent Systems Technical Report*, IRIS-99-367, 1999.

- 10. **Matarić**, **Maja J.** and Pomplun, Marc, "What do People Look at When Watching Human Movement?," *Brandeis University Computer Science Technical Report* CS-97-194, Jul 1997.
- 9. Michaud, Francois and **Matarić**, **Maja J.**, "A History-Based Learning Approach for Adaptive Robot Behavior Selection," *Brandeis University Computer Science Technical Report* CS-97-192, Jul 1997.
- 8. **Matarić**, **Maja J.**, "Using Communication to Reduce Locality in Distributed Multi-Agent Learning," *Brandeis University Computer Science Technical Report* CS-96-190, Nov 1996.
- 7. Fontan, Miguel S. and **Matarić**, **Maja J.**, "The Role of Critical Mass in Multi-Robot Adaptive Task Division," *Brandeis University Computer Science Technical Report* CS-96-187, Oct 1996.
- 6. Goldberg, Dani and **Matarić**, **Maja J.**, "Interference as a Guide for Designing Efficient Group Behaviors," *Brandeis University Computer Science Technical Report* CS-96-186, May 1996.
- 5. **Matarić**, **Maja J.**, "Analyzing Visual Behaviors in Hand Gesture Imitation," *Brandeis University Computer Science Technical Report* CS-96-185, Feb 1996.
- 4. **Matarić**, **Maja J.** and Cliff, Dave T., "Challenges In Evolving Controllers for Physical Robots," *Brandeis University Computer Science Technical Report* CS-95-184, Nov 1995.
- 3. **Matarić, Maja J.**, "Interaction and Intelligent Behavior," *MIT AI Lab Tech Report* # 1495, Aug 1994.
- 2. **Matarić**, **Maja J.**, "A Comparative Analysis of Reinforcement Learning Methods," *MIT AI Lab Memo* # 1322, Oct 1991.
- 1. **Matarić**, **Maja J.**, "A Distributed Model for Mobile Robot Environment-Learning and Navigation," *MIT AI Lab Tech Report* # 1228, May 1990.

INVITED TALKS

Keynote & Plenary Talks

- "Socially Assistive Robotics", TEDx Palo Alto 2024—AI and the Human Potential, Feb 12, 2024.
- "A Robot Just for You: Personalized Human-Robot Interaction for the Needs and Preferences of Each User", keynote talk, ACM International Conference on Multimodal Interaction (ICMI-2023), Paris, France, Oct 11, 2023.
- "A Robot Just for You: Personalized Human-Robot Interaction for the Needs and Preferences of

Each User", keynote talk, IEEE International Conference on System, Man, Cybernetics (SMC-2023), Honolulu, Hawaii, Oct 3, 2023.

Class Speaker, American Academy of Arts and Sciences Induction Ceremony, MIT, Cambridge, MA, Sep 30, 2023.

"Robots that Assist and Care: Developing Socially Intelligent Robots for Good", main stage talk, AI for Good Global Summit, Geneva, Switzerland, July 6, 2023.

"A Robot Just for You: Personalized Human-Robot Interaction for the Future of Work and Care", keynote talk, IROS 35th Anniversary Forum, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Kyoto, Japan, Oct 25, 2022.

"Robots as Mirrors of Human Nature: How to Create Human-Robot Interactions That Bring Out Our Best, Not Our Worst", keynote talk, 31st IEEE International Conference on Robot and Human Interaction and Communication (RO-MAN), Naples, Italy, Aug 31, 2022.

"Socially Assistive Robotics: Methods and Implications for the Future of Work and Care", keynote talk, Robophilosophy Conference, Helsinki, Finland, Aug 15, 2022. Presented remotely.

"Robots that Care: Socially Assistive Robotics for the Future of Work and Care", keynote talk, 18th IEEE International Conference on Advanced Robotics and its Social Impacts (ARSO 2022), Long Beach, CA, May 29, 2022.

"Socially Assistive Robotics: Research, Applications, and Implicants on Diversity and Inclusion", Nature Conference Breaking Barriers Toward Gender Equity, keynote talk, Mar 10, 2022. Presented remotely.

"Robots that Care: Socially Assistive Robotics and the Future of Work", ACM Distinguished Lecture, GCU-ACM Student Chapter, Punjab, Pakistan, Mar 5, 2022. Presented remotely.

"Our Robot Companions" National Academy of Science (NAS) Science & Entertainment Exchange presentation, Feb 9, 2022. Presented remotely.

"Socially Assistive Robotics for Supporting Early Childhood Development", Neonatal Evaluation Outcomes Network (NEON) Annual Summit, Feb 10, 2021. Presented remotely.

"Complementing Human Therapists While Improving ASD Therapy Access and Motivation Through Individualized Socially Assistive Robotics", keynote talk, American Psychological Association (APA) Conference on Technology, Mind, and Society, Nov 13, 2020. Presented remotely.

"Human-Machine Interaction and Socially Assistive Robotics as Pathways to Personalizing Care, Health, and Wellness", Mikey Milner Professorship Keynote, 14th Annual Research Symposium, Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital, Toronto, Ontario, Canada, Nov 19, 2019.

"Automation vs. Augmentation: Socially Assistive Robotics and the Future of Work", keynote talk at the 25th anniversary 2019 ACM MobiCom Conference, Los Cabos, Mexico, Oct 22, 2019.

"Automation vs. Augmentation: Socially Assistive Robotics and the Future of Work", keynote talk at the Design Automation Conference, San Francisco, CA, Jun 28, 2018.

"Socially Assistive Robotics", podium interview with the CTO of Microsoft, Wall Street Journal CIO Summit, San Francisco, March 5-6, 2018.

"Robots That Care", New York Times New Work Summit: Leading in the Age of AI, Half Moon Bay, Feb 12-13, 2018.

"Automation vs. Augmentation: Socially Assistive Robotics and the Future of Work", IEEE International Conference on Robotic Computing, keynote talk, Laguna Hills, CA, Jan 31, 2018.

"Automation vs. Augmentation: Socially Assistive Robotics", IEEE/RSJ International Conference on Intelligent Robots and Systems IROS, plenary talk, Vancouver, Canada, Sep 27, 2017.

"Socially Assistive Robotics: Creating Robots That Care", British Computing Society Karen Sparck Jones Lecture, London, UK, May 25, 2017.

"Socially Assistive Robotics", American Association for the Advancement of Science (AAAS) Annual Meeting, Boston, MA, Feb 17, 2017.

"Robots that (Provide) Care", keynote talk, Eskaton Foundation, Sacramento, CA, Dec 2, 2016.

"Socially Assistive Robotics and the Future of Work", keynote talk, International Conference on Social Robotics, Kansas City, KS, Nov 2, 2016.

"Robots that (Provide) Care", Toastmasters Founder's District Fall Conference, Cerritos, CA, Oct 29, 2016.

"Meet Your Family Robot" invited panel, Wall Street Journal Digital Live, Laguna Beach, CA, Oct 26, 2016.

"Engineering Social Robots: Next Generation of Human-Robot Interaction", MIT Technology Review EmTech Digital, San Francisco, CA, May 24, 2016.

"Robots that (Provide) Care", MIT Alumni Club, Mar 24, 2016.

"Socially Assistive Robotics: Personalized Machines that (Provide) Care", keynote talk, IEEE International Conference on Pervasive Computing (PerCom-2015), St. Louis, MO, Mar 24, 2015.

"Socially Assistive Robotics: Personalized Machines that (Provide) Care", Half Century Trojans Going Back to College Day, USC, Feb 26, 2015.

"Push", keynote talk, Intel Women's Engineer & Fellows Forum, Santa Clara, CA, Sep 16, 2014.

"Socially Assistive Technologies: Creating Machines That Care", dinner keynote talk, 2014 Computing Research Association (CRA) Snowbird Conference, Jul 21, 2014.

"How (and When) Will Robots Become Part of Our Lives and What You Should Do About It", keynote talk, Global Conference on Educational Robotics, Los Angeles, CA, Aug 1, 2014.

"Human-Robot Interaction for Socially Assistive Robotics", keynote talk, International Conference on Human-Robot Interaction, Bielefeld, Germany, Mar 5, 2014.

"Push", keynote talk, Intel International Sales and Marketing Conference (ISMC) Global Women's Networking Lunch, Las Vegas, NV, Feb 11, 2014.

"One Robot Per Person: Inventing Socially Assistive Robotics", National Academy of Sciences Distinctive Voices @ Beckman Center, Irvine, CA, Nov 20, 2013.

"Socially Assistive Robotics: Human-Robot Interaction Methods for Creating Robots That Care", 27th Conference on Artificial Intelligence (AAAI-2013), Bellevue, WA, Jul 16-18, 2013.

"Socially Assistive Robotics for Rehabilitation: The Personal Touch Without the Touch", 13th International Conference on Rehabilitation Robotics (ICORR-2013), University of Washington, WA, Jun 24, 2013.

"Socially Assistive Robotics: A Robot for Each of You", Mirman School's 50 Years With Women in STEM, Mar 20, 2013.

"The Future is Now for Socially Assistive Robotics: Robots for Patients with Cerebral Palsy, Stroke, Dementia", lunch keynote talk, the third Transformative Technologies Conference, Rancho Los Amigos, CA, Feb 23, 2013.

"Socially Assistive Robotics and Discoveries on the Science Path," Women in Engineering, LA Girl Geek Dinners, Google Inc., Venice, CA, Sep 20, 2012.

"Batteries Not Included – Robots as Caregivers," at the 2012 Directors Guild of America (DGA) Retreat, *Science Friction: How New Science Can Spark New Stories*, Los Angeles, CA, Sep 12, 2012.

"Robots Among Us? – Inventing Socially Assistive Robotics," Science Scene Program by the NSF Office of Legislative and Public Affairs, and Ready on the S.E.T. (Science, Engineering, and Technology) Initiative by the Entertainment Council talk and panel, Los Angeles, CA, Jul 14, 2011.

"Robots Among Us? – Inventing Socially Assistive Robotics (and Some Good Advice, too!)," keynote talk, Global Conference on Educational Robotics, Anaheim, CA, Jul 9, 2011.

"Robots Among Us? – Human-Robot Interaction Methods for Socially Assistive Robotics," keynote talk, Federated Computing Research Conference (FCRC), San Jose, CA, Jun 10, 2011.

"Robots Among Us? – Inventing Socially Assistive Robotics," National Academy of Science (NAS) Science & Entertainment Exchange talk and panel, Directors Guild of America, Los Angeles, CA, Jun 9, 2011.

"Why Student Mentoring is Irresistible and How to Make its Lessons Stick," keynote talk, NSF Research Experience for Undergraduates Conference, Pasadena, CA, Mar 18, 2011.

"Robots Among Us? – Socially Assistive Robotics as a Means of Addressing the Healthcare Challenge," plenary talk, USC Viterbi School of Engineering Masters and Professional Programs Preview Day, Nov 7, 2010.

"Robots Among Us? – Socially Assistive Robotics as a Tool for Socialization," keynote address, Koch-Young Resource Center rededication, April 22, 2010.

"Robots Among Us? – Inventing the Future of Socially Assistive Robotics," plenary presentation, TEDx@USC, Los Angeles, April 13, 2010.

"Robots Among Us? – Inventing the Future of Socially Assistive Robotics," keynote address, RoboDevelopment Conference and Exposition, Santa Clara, CA, Nov 18, 2008.

"Robots Among Us? – Socially Assistive Robotics for Rehabilitation," keynote address, Virtual Rehabilitation Conference, Vancouver, CA, Aug 25, 2008.

"Being the Best Place for our Best Faculty," USC School of Pharmacy Retreat, Lake Arrowhead, CA, May 27, 2008.

"Robots Among Us? – Inventing the Future of Human-Centered Technology," keynote address, California State Science Fair, California Science Center, Los Angeles, May 19, 2008.

"Socially Assistive Robotics for Extending the Cognitive and Physical Healthspan," keynote talk at the Sixth IARP-IEEE/RAS-EURON Workshop on "Technical Challenges for Dependable Robots in Human Environments," Pasadena, May 17, 2008.

"Toward Assistive Interactive Human-Centered Robotics," American Astronautics Society National Conference and 53rd Annual Meeting, Pasadena, CA, Nov 14, 2006.

"Robots Among Us – Inventing the Future of Human-Centered Technology," NASA Goddard Summer Academy public lecture, University of Maryland, College Park, June 22, 2006.

"Assistive Interactive Human-Centered Robotics," dinner keynote talk, RecTech State of the Science Conference on Exercise and Recreational Technologies for People with Disabilities, Denver, CO, May 30, 2006.

"Robots Among Us – Inventing the Future of Human-Centered Technology," Northridge Hospital Medical Center, 50th Anniversary Symposium, Woodland Hills, March 25, 2006.

"Inventing the Future of Human-Centered Technology," plenary talk, USC's 125th Anniversary Academic Convocation, Oct 6, 2005.

"The State of the Art in Multi-Robot Control: Swarms v. Teams," keynote talk (via video), RoboCup Symposium, University of Padova, July 10-11, 2003.

"From What You See to What You Do: Imitation in Humans and Humanoid Robots," plenary talk, Wallenberg Hall Inauguration, 2nd Peter Wallenberg Symposium, "Learning and Memory - From Brains to Robots," Stanford University, Oct 25-26, 2002.

"Principled and Efficient Methods for Control and Learning in Robot Teams and Humanoids," keynote talk, 9th International Symposium in Intelligent Robotic Systems (SIRS'2001), Toulouse, France, 18-20 Jul, 2001.

"From What You See to What You Do: Imitation in Humans and Humanoid Robots," 5th International Conference on Cognitive and Neural Systems, Boston University, Boston, MA, Jun 2, 2001.

"From Robotics to Ubiquity," plenary talk, Center for Autonomous Systems Brainstorming Workshop, Royal Institute of Technology, Stockholm, Sweden, Sep 18-19, 2000.

"From People to Robots, and Back," Royal Canadian Institute Lecture, sesquicentennial year, University of Toronto, Canada, March 5th, 2000.

Invited Talks - excluding keynote, plenary, and conference paper talks

"Socially Assistive Robotics at Almost 25: How Far We Have Come and What the Next Steps Are", IEEE RO-MAN Conference, Workshop on Socially Assistive Robotics, Aug 25, 2024.

"A Robot Just for You: Personalized Human-Robot Interaction for the Needs and Preferences of Each User", *Virtue and Affect for Social Robots, CSUF Philosophy 2024 Symposium*, Cal State University Fullerton, Apr 19, 2024.

"A Robot Just for You: Personalized Human-Robot Interaction for the Needs and Preferences of Each User", Osher Lifelong Learning Institute, UCLA, Oct 23, 2023.

"Socially Assistive Robotics as a Path to Accessible Personalized Autism Spectrum Disorder (ASD) Therapy Support", ACM ICMI 2023 Workshop on Multimodal Conversational Agents for People with Neurodevelopmental Disorders, Oct 13, 2023.

"Robots that Care: Socially Assistive Robotics and the (Near?) Future of Work and Care", MIT CSAIL 20/60: 20 Years of CSAI and 60 Years of Project Mac, MIT, Cambridge, MA, Jun 26,

2023.

"A Robot Just for You: Personalized Human-Robot Interaction for the Needs and Preferences of Each User", Contextual Robotics Institute, Computer Science Department, University of California San Diego, Jun 8, 2023.

"A Robot Just for You: Socially Assistive Robotics for Personalized, Adaptive Social Support of Each User", Bridging AI and Disability Workshop, Boston University, Mar 24, 2023. Delivered remotely.

"Multimodal Human-Machine Interaction: Continual Long-Term Adaptation to Each User", Google DeepMind, Feb 3, 2023, presented remotely.

"Socially Assistive Robotics Right Now: Personalized Embodied Systems", ACM Distinguished Lecture, Orange County chapter of the ACM, Jan 18, 2023.

"Robots for Wellness", IEEE RO-MAN Conference, Workshop on HRI for Wellbeing (HRI4Wellbeing), Naples, Italy, Sep 2, 2022.

"Multimodal Human-Machine Interaction: Understanding, Engaging, and Supporting Each User", Microsoft Research, Aug 19, 2022. Presented remotely.

"Multimodal Human-Robot Interaction: Understanding, Engaging, and Supporting Each User", Google-UC Berkeley Multi-Agent Reinforcement Learning Seminar, Jul 1, 2022. Presented remotely.

"Multimodal Human-Robot Interaction: Understanding, Engaging, and Supporting Each User", International Society for Research on Emotion (ISRE) Conference Affective Computing Workshop, Los Angeles, CA, Jun 15, 2022.

"The Future of Personalized Socially Assistive Robot Companions", CMU Robotics Institute Summer Scholars (RISS) seminar, Jun 8, 2022. Presented remotely.

"The Promise of Socially Assistive Robotics for Children on the Autism Spectrum", Not Your Ordinary Autism Mom network, May 5, 2022. Presented remotely.

"Socially Assistive Robotics and the Future of Work and Care", Puget Sound SIGCHI chapter, April 21, 2022. Presented remotely.

"Robots That Care: Socially Assistive Robotics and the Future of Work and Care", Gerald M. Masson Distinguished Lecture, Department of Computer Science, Johns Hopkins University, Apr 14, 2022. Presented remotely.

"Robots That Care: Socially Assistive Robotics and the Future of Work and Care", Department of Computer Science, CSE Distinguished Lecture, University of Buffalo, Mar 10, 2022. Presented remotely.

"From Single Sessions to Six-Month Deployments: Lessons from 18 Years of HRI and SAR In the Wild." ACM Human-Robot Interaction (HRI) Conference Workshop on Longitudinal Social Impacts of HRI Over Long-Term Deployments, Mar 7, 2022. Presented remotely.

"Socially Assistive Robotics for Supporting Behavior Change: Evidence from Autism Therapy, Stroke Rehabilitation, Healthy Aging, and More", USC Behavioral Science & Wellbeing Policy Initiative Seminar, Feb 7, 2022. Presented remotely.

"Robots That Care: Socially Assistive Robotics and the Future of Work and Care", Mechanical and Aerospace Engineering Colloquium, University of California Riverside, Sep 20, 2021. Presented remotely.

"Multi-Modal Human-Robot Interaction: Understanding, Engaging, and Supporting Each User." International Conference on Computer Vision (ICCV) First Workshop on Crossmodal Social Animation (XS-Anim), Oct 16, 2021. Presented remotely.

"Socially Assistive Robotics for Supporting Child Assessment and Development." The Help Group Summit 2021, Los Angeles, CA, Oct 15, 2021. Presented remotely.

"What's Involved in (Training for) Developing Personalized Embodied Systems for Support of Health, Wellness, Education, and Training", Interdisciplinary Research Theme on Engineering Education Research and AI-Augmented Learning, University of Colorado at Boulder, Aug 20, 2021. Presented remotely.

"Socially Assistive Robotics: What it Takes to Get Personalized Embodied Systems into Homes to Support of Health, Wellness, Education, and Training", Mechanical and Aerospace Engineering Colloquium, Arizona State University, Apr 15, 2021. Presented remotely.

"Socially Assistive Robotics: What it Takes to Get Personalized Embodied Systems into Homes to Support of Health, Wellness, Education, and Training", Robotics Colloquium, University of Washington, Feb 19, 2021. Presented remotely.

"Socially Assistive Robotics, Embodiment, and the Future of Care", Nu Rho Psi (national honor society for neuroscience majors) seminar series, USC, Feb 2, 2021. Presented remotely.

"Socially Assistive Robotics: Toward a Balanced Future of Work and Care", "Robot is 100! Exploring the Influence of Karel Capek's Play R.U.R. on Other Forms of Art and the Future of Robotics", UCLA Library and the General Consulate of the Czech Republic. Feb 4, 2021. Presented remotely.

"Socially Assistive Robotics: What it Takes to Get Personalized Embodied Systems into Homes to Support of Health, Wellness, Education, and Training", Computer Science Colloquium, Cornell University, Dec 14, 2020. Presented remotely.

"Socially Assistive Robotics as a Path to Accessible Personalized ASD Therapy Support", Simons

Center for the Social Brain (SCSB) Colloquium Series, MIT Simons Center for the Social Brain, MIT, Dec 9, 2020. Presented remotely.

"Socially Assistive Robotics Right Now: The Need for Personalized Embodied Systems for In-Home Support of Health, Wellness, Education, and Training", Department of Computer Science and Engineering, Distinguished Lecture Series, University of California San Diego, Nov 16, 2020. Presented remotely.

"Socially Assistive Robotics Right Now: The Need for Personalized Embodied Systems for In-Home Support of Health, Wellness, Education, and Training", Maryland Robotics Center, University of Maryland, Nov 6, 2020. Presented remotely.

"Socially Assistive Robotics Right Now: The Need for Personalized Embodied Systems for In-Home Support of Health, Wellness, Education, and Training", Robotics and Automation Conference, Edinburgh Centre for Robotics", University of Edinburgh, Oct 6, 2020. Presented remotely.

"Robotics for Eldercare: Are We Almost There?", Institute for Senior Living, Pasadena, CA, Oct 2, 2020. Presented remotely.

"Socially Assistive Robotics Right Now: The Need for Personalized Embodied Systems for In-Home Support of Health, Wellness, Education, and Training", GRASP Lab Seminar Series, University of Pennsylvania, Sep 30, 2020. Presented remotely.

"Socially Assistive Robotics: Reshaping Interaction and Care", MicroWorkshop on Robotics, Harvey Mudd College, May 27, 2020. Presented remotely.

"Shaping the AI Landscape & Training Leaders, not Just Producers", AI-Enabled Product Design, Claremont Graduate University, May 22, 2020. Presented remotely.

"Robots That Care: Human-Machine and Human-Robot Interaction for Long-Term User Engagement and Behavior Change", UC Santa Barbara Media Arts and Technology (MAT) Program Seminar, Mar 2, 2020.

"Socially Assistive Agents and Robots: What We Need to Learn About People", Deep Learning Stage, RE*WORK San Francisco Summit, San Francisco, CA, Jan 31, 2020.

"The Robots Are Here to Help", LA High Table MIT/Princeton/Yale alumni, Nov 11, 2019.

"Automation vs. Augmentation: Socially Assistive Technologies and the Future of Work", AI & Robotics Conference, Shenzhen, China, Sep 2-3, 2019.

"Personalized Machines That Care", Big Data in Precision Health Conference, Stanford Medical School, Stanford, CA, May 23, 2019.

"Robots That Care: How Robots Understand, Elicit, and Display Emotion", AI-LA Meetup, Los Angeles, May 15, 2019.

"Automation vs. Augmentation: Socially Assistive Robotics and the Future of Work", RT Chien Distinguished Lecture, Interdisciplinary Research Institute Coordinated Science Laboratory, University of Illinois, Urbana-Champaign, Mar 27, 2019.

"Robots That Care", USC Sidney Harman Academy for Polymathic Study, Catalina Island, March 23, 2019.

"Human-Robot Interaction for Data-Driven Personalized Care", 2019 Saban Institute Symposium, Children's Hospital Los Angeles, Feb 12, 2019.

"Automation vs. Augmentation: The Future of Work and Robots for Humanity", Public Affairs Council, Laguna Beach, CA, Jan 20-22, 2019.

"Creating Robots for Everyday Life: The Real Challenges of Human-Robot Interaction", Google Brain, Nov 7, 2018.

"Robotics for Eldercare", Institute for Senior Living, Pasadena, CA, Aug 23, 2018.

"Socially Assistive Robotics: Inventing Robots that Care", WGA-SEE-Google Science Night, Google, Venice, CA, Aug 9, 2018.

"The Promise and Challenges of Socially Assistive Robotics: Robots that Care", UW-MSR Summer Institute on Social Robotics, Alderbrook, WA, Jul 24, 2018.

"Creating Robots that Care", League of Women Voters Palos Verdes Peninsula and San Pedro, Jun 9, 2018.

"Automation vs. Augmentation: Socially Assistive Robotics and the Future of Work", Seminar Series, Superior Court of Los Angeles, Feb 2, 2018.

"Embodied Socially Assistive Agents: Going Beyond Assistance and Toward Behavior Change", AI Assistants Summit, Re-Work, San Francisco, CA, Jan 25, 2018.

"Socially Assistive Robotics and the Future of Work", Global Security Seminar, UCLA, Dec 5, 2017.

"Automation vs. Augmentation: Socially Assistive Robotics and the Future of Work", Stanford Robotics Seminar, Palo Alto, CA, Nov 3, 2017.

"Automation vs. Augmentation: Socially Assistive Robotics and the Future of Work", Caltech TechFest, Pasadena, CA, Oct 16, 2017.

"Endowing Socially Assistive Robots With the Ability to Help Young People With Autism and

Other Special Needs", Help Group Summit, Los Angeles, CA, Oct 13, 2017.

"Creating Robots for Everyday Life: The Hidden Challenges of Human-Robot Interaction", Toyota Research Institute, Los Altos, CA, Oct 12, 2017.

"Socially Assistive Robotics for Supporting Lifelong Health and Wellness", CalIT2 Transforming Everyone's Aging (TEA) Seminar Series, University of California Irvine, Irvine, CA, Oct 4, 2017.

"Automation vs. Augmentation: Socially Assistive Robotics and the Future of Work", Google, Mountain View, CA, Aug 1, 2017.

"Socially Assistive Robotics and the Future of Work", distinguished lecture, Princeton University, Apr 21, 2017.

"Robots that Care and the Future of Work", Southern California Robotics Symposium, Los Angeles, CA, Apr 14, 2017.

"Socially Assistive Robotics and the Future of Work", Dean's Lecture, Harvard University, Mar 3, 2017.

"Automation vs. Augmentation: Socially Assistive Robotics and the Future of Work", Hilbert Symposium in Robotics, University of California San Diego, San Diego, CA, Feb 23, 2017.

"Bridging the Gap in Human Care with Affordable Robots", Impact Roundtable, LA, CA, Oct 14, 2016.

"Bridging the Gap in Human Care with Affordable Robots", RoboBusiness 2016, San Jose, CA, Sep 29, 2016.

"Keep Calm and Just Push", Intel Sales Conference, Anaheim, CA, Aug 2015.

"Academic Leadership" Computing Research Association-Women (CRA-W) Distinguished Professor Cohort of Associate Professors Project (CAPP) Workshop, Portland, OR, Jun 13, 2015.

"Inventing the Future of Personalized Technologies", Sydney Harman Academy for Polymathic Studies, USC, Jan 28, 2015.

"Socially Assistive Robotics: Human-Robot Interaction Methods for Creating Robots that (Provide) Care", Computer Science Colloquium, Brown University, Jan 21, 2015.

"Socially Assisting HRI: An Intervention", AAAI Fall Symposium on "AI for Human-Robot Interaction", Arlington, VA, Nov 13, 2014.

"Human-Robot Interaction Methods for Creating Robots that Care", Computer Science Department Colloquium, Johns Hopkins University, Nov 12, 2014.

"Socially Assistive Robotics: Future Directions in Personalized Rehabilitation and Care", 14th Annual Coleman Institute National Conference, Broomfield, CO, Oct 9, 2014.

"Socially Assistive Technologies: Creating Machines That Care", University Colloquium, Harvey Mudd College, Claremont, CA, Sep 25, 2014.

"Socially Assistive Robotics for Providing Care for the Aging Population", On Lok Conference, San Francisco, CA, Sep 16, 2014.

"Machines that (Provide) Care", Perry Outreach Program, Children's Hospital Los Angeles, Aug 16, 2014.

"Creating Patient-Centered Technologies for Autism Spectrum Disorders", USC Autism Initiative Kickoff Luncheon, Aug 27, 2014.

"Embodied Communication in Socially Assistive and Service Robotics", Robotics: Science and Systems Conference Workshop on Learning Plans with Context from Human Signals, UC Berkeley, Berkeley, CA, Jul 13, 2014.

"Machines that (Provide) Care", Computing Community Consortium (CCC) Computing Visions 2025: Interacting with Computers All Around Us Planning Workshop, Washington DC, May 12, 2014.

"STEM Mythbusting", presentations to high school students, South Pasadena High School, three classes, Mar 30, 2014.

"The Potential for Socially Assistive Robotics as a Tool for ASD Diagnosis and Therapy", Foothill Autism Alliance, Inc. family resource meeting, Pasadena Child Development Associates, Pasadena, CA, Mar 12, 2014.

"Socially Assistive Robotics for the Aging Population", Andrus School of Gerontology Colloquium, University of Southern California, Los Angeles, CA, Feb 13, 2014.

"Socially Assistive Robotics: Human-Robot Interaction Methods for Creating Robots That Care", Distinguished Lecture, Computer Science Department, University of Toronto, Jan 21, 2014.

"Socially Assistive Robotics for Social and Communication Learning", NSF Avatars and Robotics Signing Creatures Workshop, Gallaudet University, Washington, DC, Nov 15, 2013.

"Socially Assistive Robotics: Human-Robot Interaction Methods for Creating Robots that Care", Computer Science Colloquium, School of Engineering and Applied Sciences, Harvard University, Cambridge, MA, Nov 14, 2013.

"One Robot Per Person: Getting Your Own Personal Socially Assistive Robot", Marlborough School, Los Angeles, CA, Nov 6, 2013.

"Socially Assistive Robots as Therapeutic Tools for Children with Autism Spectrum Disorders" The Help Group Summit 2013, Los Angeles, CA, Oct 25, 2013.

"One Robot Per Person: Getting Your Own Personal Socially Assistive Robot", Internal Intel Robotics Workshop, North Plains, OR, Jul 17, 2013.

"Human-Robot Interaction Methods for Socially Assistive Robotics", Computer Science Colloquium, University of California, Irvine, Jun 7, 2013.

"Human-Robot Interaction Methods in Socially Assistive Robotics", 20th Joint Symposium on Neural Computation, Caltech, Pasadena, Jun 1, 2013.

"Socially Assistive Robots That Care – Another Path to Personalized Medicine", Innovation, Design, and Emerging Alliances in Surgery (IDEAS), Dept. of Surgery, Beth Israel Deaconess Medical Center, Boston, MA, Apr 27, 2013.

"Academic Leadership: Why and How" Computing Research Association-Women (CRA-W) Distinguished Professor Cohort of Associate Professors Project (CAPP) Workshop, San Francisco, CA, Nov 17, 2012.

"Batteries Not Included – Robots as Caregivers", Disney Animation Studios, Burbank, CA, Sep 28, 2012.

"Socially Assistive Robotics for Neurorehabilitation," State of Science in Rehabilitation Conference, Chicago, IL, May 13, 2011.

"Human-Robot Interaction for Socially Assistive Robotics," NSF-Japan Science Foundation Workshop on Human-Robot Interaction, Menlo Park, CA, Dec 1, 2010.

"Human-Robot Interaction for Socially Assistive Robotics," Caltech Neuromorphic Engineering Student Symposium (NESS), Oxnard, CA, Nov 21, 2010.

"Robots Among Us? Socially Assistive Robotics for Cognitive and Physical Exercise for the Elderly," AAHSA Conference, Los Angeles, Oct 31, 2010.

"Robots Among Us? – Socially Assistive Robotics as a part of the Answer to the Healthcare Challenge," Rancho Los Amigos Women's Conference, Downey, CA, Oct 30, 2010.

"Can Socially Assistive Robots Help Kids with Autism Spectrum Disorders?" The Help Group Summit 2010, Los Angeles, CA, Oct 1-2, 2010.

"Socially Assistive Robotics as a Tool for Training, Rehabilitation, and Socialization," Rancho Los Amigos, Sep 2, 2010.

"Socially Assistive Robotics for Motor, Cognitive, and Social Rehabilitation," USC Neuroscience Program Seminar, Mar 2010.

On maternity leave; travel minimized.

"Socially Assistive Robotics as an Intervention for Autism Spectrum Disorders," The Help Group Summit 2009, Los Angeles, CA, Sep 2009.

"Human-Centered Technology for Optimizing Human Behavior," Distinguished Lecture, Computer Science Department, Tufts University, Apr 29, 2009.

"Socially Assistive Robotics for Optimizing Human Behavior," Computer Science Colloquium, Harvey Mudd College, Apr 23, 2009.

"Socially Assistive Robotics for Optimizing Human Behavior," Distinguished Lecture Series, Electrical Engineering and Computer Science Lecture Series, Vanderbilt University, Apr 3, 2009.

"Socially Assistive Robotics for Individuals with Dementia and Alzheiemer's Disease," The many Faces of Dementia: Linking Research, Practice and Prevention Symposium, USC, Feb 20, 2009.

"Socially Assistive Robotics for Optimizing Human Behavior," NASA Ames, Moffett Field, Nov 18, 2008.

"Advice For Success in Academic Leadership," Computing Research Association-Women (CRA-W) Distinguished Professor Cohort of Associate Professors Project (CAPP-R) Workshop, Santa Fe, NM, Nov 14, 2008.

"Social Robots for Kids? Exploring Socially Assistive Robotics for Autism Spectrum Disorder Interaction," The Help Group Summit 2008, Los Angeles, CA, Sep 27 2008.

"Toward Embodied Multi-Modal Human-Robot Communication and Interaction," Workshop on Multi-Modal Grounding for Virtual Humans and Robots, Institute for Creative Technologies, Marina del Ray, Sep 13, 2008.

"Me@USC," Best of USC Session, USC Alumni Leadership Conference, Los Angeles, CA, Sep 12, 2008.

"Socially Assistive Robotics for the Physical, Cognitive, and Mental Healthspan," Supportive Technology and Design for Healthy Aging Conference of the University of Washington Institute on Aging, Skamania Lodge, Washington, Jun 25, 2008.

"Scalable Multi-Robot Coordination: From Teams to Swarms," NSF/AUVSI/FAA/DHS Workshop on UAS Research Directions for the National Air Space, San Diego, CA, Jun 10, 2008.

"Robots Among Us? – Inventing the Future of Human-Centered Technology," Applied Minds Corp., Glendale, Jan 18, 2008.

"Why 'Just Do It' is More Than a Slogan," USC Women in Management, Sep 11, 2007.

"Control and Learning Strategies for Socially Assistive Robotics," Robotics, Control and Mechatronics Colloquium, University of Washington, Seattle, Jun 1, 2007.

- "Socially Assistive Robotics: Shaping Human-Centered Technology," Robotics Seminar, Georgia Institute of Technology, Feb 19, 2007.
- "Robots Among Us? Inventing the Future of Human-Centered Technology," USC Parkside international Residential College Master's Dinner Speaker Series, Oct 10, 2006.
- "Teaching Robotics to All Ages," Grace Hopper Celebration of Women in Computing, San Diego, CA, Oct 7, 2006.
- "Robots Among Us? Inventing the Future of Human-Centered Technology," Viterbi School of Engineering Trojan Family Weekend, Oct 6, 2006.
- "Beginning the Delicate Dance with Modern Robotics," USC Theatre Department Performance post-show presentation, Dec 2, 2005.
- "Toward Assistive Interactive Robotics," Caltech Center for Neuromorphic System Engineering retreat, Oct 29, 2005.
- "Creating Socially Assistive Human-Centered Robotics," Cancer Center Grand Rounds, USC Keck School of Medicine, Oct 25, 2005.
- "Toward Assistive Action, Interaction, and Engagement for Human-Robot and Robot-Robot Teams," Computer Science Department, University of Massachusetts, Amherst, Apr 12, 2005.
- "Toward Assistive Action, Interaction, and Engagement for Human-Robot and Robot-Robot Teams," MIT Computer Science and Artificial Intelligence Laboratory, Apr 8, 2005.
- "Toward Socially Assistive Robotics: Action, Interaction, and Engagement," MIT Media Lab, Apr 7, 2005.
- "Toward Assistive Action, Interaction, and Engagement for Robot Teams and Human-Robot Systems," Computer Science Department, Yale University, New Haven, Apr 6, 2005.
- "Robots Among Us? The Challenges of Assistive Interactive Robotics," Yale Interdisciplinary Bioethics Program, Yale University, New Haven, Apr 6, 2005.
- "Toward On-line Control of Humanoids and Human-Robot Interaction," iRobot Corp., Burlington, MA, Apr 5, 2005.
- "The Challenge of Assistive Interactive Robotics," LA Futurists Salon, UCLA, Mar 18, 2005. "Principled Coordination of Multi-Robot Systems," Motion Planning Group, Caltech, Mar 9, 2005.

"Toward Assistive Action, Interaction, and Engagement for Robot Teams and Human-Robot Systems," GRASP Lab Seminar, University of Pennsylvania, Feb 18, 2005.

"Assistive Robots and Robot Teams," Neuromorphic Engineering Student Society, Caltech, Feb 9, 2005.

"Toward Assistive Robotics: Modeling Movement, Activity, and Interaction," Caltech Vision Lab, Nov 23, 2004.

"Assistive Robotics - A Multidisciplinary Path," USC Provost's Luncheon, Retired Faculty Association, Nov 10, 2004.

"Towards Articulated and Expressive Assistive Robots," Humanoids-2004 workshop on "Humanoid Robots as Helpful Partners for People," Santa Monica, CA, Nov 10, 2004.

"Action-Embedded Human-Robot Interaction for Hands-Off Assistive Domains," AAAI-04 workshop on "Supervisory Control of Learning and Adaptive Systems," San Jose, CA, Jul 25, 2004.

"Coordination & Learning in Complex Robot Domains: Teams, Humanoids, and People," Robotics Institute, Carnegie Mellon University, Jan 2004.

"Coordination & Learning in Complex Robot Domains: Teams, Humanoids, and People," Computer Science Department, Georgia Institute of Technology, Atlanta, GA, Dec 15, 2003.

"Formalizing Intentional and Emergent Group Behavior in Robots," Biological and Artificial Swarms, Institute for Pure and Applied Mathematics (IPAM), Mathematics Department, UCLA, Oct 3, 2003.

"The Social Life of Robots," Social Studies of Social Robots Workshop, Harvey Mudd College, April 3-5, 2003.

"Human-Oriented Pervasive Robotics: From Biology to Technology, and Back," USC School of Engineering Research Retreat, LA, Mar 7, 2003.

On maternity leave; travel minimized.

"Embodied Robotic Agents," First Americas School on Agents and Multiagent Systems, USC/ISI/ICT, Jan 8, 2002.

"What is Robotics Up to These Days? Robot Teams and Humanoids," Harvey Mudd Computer Science Department, Dec 13, 2001.

"Control and Adaptation in Distributed Multi-Robot Systems," Aerospace and Mechanical Engineering Department, University of Southern California, Nov 14, 2001.

"Distributed, Adaptive Methods for Complex Coordination: Robot Teams and Humanoids," 3rd International Workshop on Biological Robotics, Lanzerote, Spain, Jun 30-Jul 4 2001.

"Principled and Efficient Methods for Behavior-Based Control and Learning in Robot Teams and Humanoids," HRL Labs, Mar 15, 2001.

"Efficient Control and Learning in Complex Robotic Systems: Robot Teams and Humanoids on Their Best Behavior," NASA Ames Research Center, Mar 2, 2001.

"The Future of Large-Scale Distributed Robotics," DARPA Cooperative Robotics Workshop, Feb 21, 2001.

"Primitives-Based Control and Learning by Imitation," vision group, California Institute of Technology Computer Science Dept., Jan 26, 2001.

"Basis Behavior Primitives for Control and Learning in Robot Teams and Humanoids," NASA Workshop on Biomorphic Robotics, California Institute of Technology, Aug 14-16, 2000.

"Keepin' it Real: Learning in Noisy, Non-Stationary Physical Multi-Robot Systems," International Conference on Machine Learning (ICML) 2000, Workshop on Multi-Agent Systems: Theory and Practice, Stanford University, Jul 2, 2000.

"Principled Methods for Behavior-Based Coordination and Imitation Applied to Robot Teams and Humanoids," Stanford University Computer Science Dept., May 24, 2000.

"Robot Teams and Humanoids on Their Best Behavior," Carnegie Mellon University AI Seminar, May 1, 2000.

"Making Robot Teams and Humanoids Behave: Principled Behavior-Based Coordination and Imitation," Computation and Neural Systems Program, California Institute of Technology, Apr 10, 2000.

"Keeping Robot Teams and Humanoids on Their Best Behavior: Principled Behavior-Based Coordination and Imitation," Computer Science Dept., Michigan State University, April 4, 2000.

"Keeping Robot Teams and Humanoids on Their Best Behavior Principled Behavior-Based Coordination and Imitation," Computer Science Dept., Brandeis University, March 15, 2000.

"Making Robot Teams and Humanoids Behave: Principled Behavior-Based Coordination and Imitation," Artificial Intelligence Lab, MIT, Computer Science Dept., March 14, 2000.

"Keeping Robot Teams and Humanoids on Their Best Behavior Principled Behavior-Based Coordination and Imitation," Computer Science Dept., University of Toronto, Canada, March 6th, 2000.

On maternity leave; travel minimized.

"Making Distributed Multi-Robot Systems Behave: Principled Behavior Selection, Learning, and Communication," Computer Science Dept., UCLA, Nov 9, 1999.

"Adaptive Group Behavior in Distributed Multi-Robot Systems," Jet Propulsion Laboratory, Center for Integrated Space Microsystems, May 28, 1999.

"Making Groups of Robots Behave and Learn," W.V.T. Rusch Engineering Honors Colloquium, USC School of Engineering, Apr 2, 1999.

"Biological Inspirations for Facilitating Reinforcement Learning in Challenging Domains," Conference on Automated Learning and Discovery (CONALD) Workshop on Robot Exploration and Learning, Carnegie Mellon University, Jun 10-13, 1998.

"Adaptive Group Behavior and Learning: Natural and Artificial," Cognitive Science Seminar Series, UCLA, Jan 26, 1998.

"Adaptive Behavior and Learning in Groups of Autonomous Robots," Center for the Study of Evolution and the Origin of Life, UCLA, Jan 21, 1998.

"Adaptive Behavior and Learning in Groups of Interacting Autonomous Agents," Information Sciences Institute (ISI), Marina Del Ray, Nov 21, 1997.

"Distributed Control for Adaptive Multi-Robot Systems," Naval Postgraduate School, Monterey, Nov 20, 1997.

"Behavior-Based Control for Rover Autonomy and Adaptivity," Jet Propulsion Laboratory, Nov 14, 1997.

"Using Robotics to Study Social Behavior and Intelligence," Brandeis University, Board of Trustees, May 23, 1997.

"Control and Learning in Multi-Agent and Multi-Robot Systems," University of Rochester, Computer Science Dept., Rochester, NY, Apr 2, 1997.

"Sensori-Motor Integration in Imitation," University of Rochester, Center for Visual Science, Rochester, NY, Mar 31, 1997.

"Control and Learning in Multi-Robot Systems," NSF Workshop on Intelligent Robotic Agents, Porto Alegre, Brazil, Mar 17-20, 1997.

"Control and Learning in Groups of Autonomous Robots," MIT Sea Grant, AUV Seminar Series, Cambridge, Mar 13, 1997.

"Application of Artificial Life and Artificial Intelligence Methodologies to the Study of Animal

Behavior," University of Maryland, Dept. of Animal and Avian Sciences, Mar 4, 1997.

"Control and Learning in Distributed Multi-Robot Systems," Arkansas Space Grant Lecture, University of Arkansas at Little Rock and Harding University, Little Rock, Feb 19-21, 1997.

"Control and Learning in Distributed Multi-Robot Systems," University of Maryland, Computer Science Dept., Feb 5, 1997.

"Basis Behaviors for Control and Learning in Mobile and Anthropomorphic Robots," University of Southern California, Computer Science Dept, Los Angeles, Jan 29, 1997.

"Group Behavior and Learning in Distributed Multi-Robot Systems," Symposium on Technology and the Mine Problem, Naval Postgraduate School, Monterey, Nov 20, 1996.

"Control and Learning in Multi-Agent and Multi-Robot Systems," The Naval Research Laboratory (NRL), Washington DC, Nov 4, 1996.

"Adaptive Behavior and Learning in Multi-Agents Systems," Hewlett-Packard International Workshop on Interacting Autonomous Software Agents, HP Labs, Bristol, UK, Sep 30-Oct 1, 1996.

"Group Behavior and Learning in Situated Agents," Dept. of Mechanical Engineering for Computer-Controlled Machinery, Faculty of Engineering, Osaka University, Osaka, Japan, Jul 30, 1996.

"Group Behavior and Learning in Situated Agents," Dept. of Mechano-Informatic, Faculty of Engineering, University of Tokyo, Tokyo, Japan, Jul 29, 1996.

"Basis Behaviors in Social and Imitative Robot Learning," 44th ATR Science and Technology Seminar, ATR Human Information Processing Research Laboratories, Kyoto, Japan, Jul 25, 1996.

"Learning in Multi-Robot Systems," Cognitive Science Conf., San Diego, Jul 13, 1996.

"Distributed Control of Multiple Robots," Autonomous Robotic Systems for US Navy Littoral Operations Workshop, Jun 26, 1996.

"Adaptive Group Behavior," Autonomous Robotic Systems for US Navy Littoral Operations Workshop, Jun 25, 1996.

"Robotics and Science: Studying Adaptive Group Behavior," Brandies University Howard Hughes Summer Fellowship Program, Jun 14, 1996.

"Dissolving Walls, Discovering the Brain," Brandeis Alumni College, May 17, 1996.

"Group Behavior and Learning in Adaptive Multi-Agent and Multi-Robot Systems," Evolutionary Robotics 96 Conference, Tokyo, Japan, Apr 12, 1996.

"Adaptive Group Behavior and Learning," Dept. of Cognitive and Neural Systems and Center for Adaptive Systems, Boston University, Boston, MA, Feb 16, 1996.

"Multi-Robot Coordination," Naval Undersea Warfare Center, Newport, CT, Feb 2, 1996.

"Adaptive Group Behavior," Menneken Lecture, Naval Postgraduate School, Monterey, CA, Jan 18, 1996.

"Spatial and Social Learning in Intelligent Robots," SUNY Brooklyn Medical Center, New York, Dec 13, 1995.

"Adaptation in Intelligent Agents," AAAI Fall Symposium on Adaptation of Knowledge for Reuse, Cambridge, MA, Nov 11, 1995.

"Interaction and Learning in Situated Embodied Agents," Dartmouth University Computer Science Dept., Oct 18, 1995.

"Collective Behavior Design," NATO-ASI-AA Practice and Future of Autonomous Agents, Monte Verita, Switzerland, Sep 23-Oct 1, 1995.

"Novel Architectures for Robotic Navigation," Spatial Orientation and Navigation Workshop sponsored by the Office of Naval Research, National Academy of Sciences Study Center, Woods Hole, Sep 14, 1995.

"Learning to Behave Socially," Summer Course in Robot Intelligence, Coursos Verano Universidad Complutense, Madrid, Spain, Jul 3-7, 1995.

"Multi-Agent Learning and Imitation in Simulation, Robots, and Humans," Volen Center for Complex Systems Annual Retreat, Boston, Apr 1995.

"Collective Behavior and Learning in Multi-Robot Systems," From Perception to Action, First International Conference (PerAc-94), Lausanne, Switzerland, Sep 8, 1994.

"Group Behavior and Learning in Autonomous Systems," Carnegie Mellon Robotics Institute, Carnegie Mellon University, Pittsburgh, Apr 22, 1994.

"Group Behavior and Learning in Autonomous Systems," University of Southern California, Los Angeles, Apr 15, 1994.

"Interaction and Intelligent Behavior," Brown University Computer Science Dept., Providence, Feb 11, 1994.

"Intelligent Group Behavior From Simple Local Interactions," Center for Interdisciplinary Studies (ZiF), Bielefeld University, Bielefeld, Germany, Nov 26, 1993.

"Group Behavior in Adaptive Robots," Summer Course in Artificial Life, Coursos Verano Universidad Complutense, Madrid, Spain, Aug 21, 1993.

"Interaction and Intelligent Group Behavior In Robotics and Ethology," Science Innovations '93, American Association for the Advancement of Science, Boston, Aug 4, 1993.

"Interaction and Intelligent Group Behavior," Harvard University Computer Science Dept., Cambridge, Apr 21, 1993.

"Local Interaction and Group Behavior," The Rowland Institute, SNAC Seminar Series, Cambridge, Mar, 1993.

"Distributed Approaches to Behavior Control," SPIE Sensor Fusion, Boston, Nov 1992.

"Behavior-Based Architectures for Intelligent Control," Intelligent Autonomous Control Systems Workshop, RAFAEL, Leshem, Israel, Nov 2-3, 1992.

"Artificial Life and Real Robots," Mac world Expo 1992 Conference, Boston, Aug 1992.

"Designing Emergent Group Behaviors," Artificial Life Conference, Santa Fe, Jul 1992.

"Behavior-Based Control: Main Properties and Implications," Workshop on Architectures for Intelligent Control Systems, IEEE International Conference on Robotics and Automation (ICRA-92), Nice, France, May 10, 1992.

"Representation for Navigation, Exploration, and Learning in Reactive Systems," MIT Sea Grant, AUV Seminar Series, Cambridge, May 21, 1991.

"Designing Behavior-Based Robots: Exploiting Emergence, Distributedness, and Locality," AI Lab, Free University of Brussels, Belgium, Jul 18, 1990.

"A Self-Organizing Representation for a Subsumption-Based Mobile Robot," Nagoya University, Japan, Jul 12, 1990.

"Designing Behavior-Based Navigation by Exploiting Emergence," Tokyo Science University, Japan, Jul 10, 1990.

"Biologically-Inspired Environment-Learning and Navigation in a Behavior Based Robot," Workshop of Biology, Cognition, and Robotics, Sankt Augustine, Germany, Jun 1990.

"Designing For Emergent Functionality in Mobile Robots," Emergent Functionality and Self Organization Seminar, Hamburg University, Germany, Jun 12, 1990.

"Building Toto the Robot: Incremental Design and Distributed Control," Cornell University, Ithaca, Apr 1990.

"A Distributed Graph-Learning Model Based on Dynamic Landmarks," GTE Artificial Intelligence Lab, Waltham, Feb 1990.

"Environment Learning and Navigation Using a Distributed Representation," Jet Propulsion Lab, Artificial Intelligence Group, Pasadena, Oct 20, 1989.

"Environment Learning and Navigation Using a Distributed Representation," Hughes Artificial Intelligence Lab, Malibu, Oct 19, 1989.

SERVICE

Service to the Field

Advisory Board/Committee Memberships

Scientific Advisory Board, Max Planck Institute for Intelligent Systems, Stuttgart	2021-2026	
DARPA Information Science and Technology (ISAT) Study Group	2021-2024	
US Scientific Advisory Council, Nature and Scientific American (Springer)	2021-2023	
President's Fellows Advisory Board, Association for the Advancement of AI (AAA)	<i>I)</i> 2019-present	
Advisory Committee, AAAS Leshner Leadership Institute	2018-present	
National Advisory Panel, Rehabilitation Engineering Research Center		
on Recreational Technologies and Exercise Physiology for Persons		
with Disabilities, University of Illinois, Chicago	2007-present	
Board of Directors, Alfred Mann Institute, USC	2020-2021	
Board of Directors, USC ICT Productions, Inc.	2020-2021	
Council, Computing Community Consortium (CCC)	2016-2019	
Advisory Board, Institute for Robotics and Intelligent Machines,		
Georgia Institute of Technology Apr 2	015-Aug 2017	
Advisory Board, Institute for the Developing Mind,		
Children's Hospital Los Angeles	2015-2019	
Review Committee, Georgia Institute of Technology Robotics PhD Program	Mar 2012	
Advisory Board, Carnegie Mellon University President's Robotics Institute Dec 2	010-May 2011	
Review Committee, Human Systems Design Program, Office of Naval Research	Nov 2010	
Advisory Committee, NSF Computing and Information Sciences and Engineering		
1	008-May 2012	
Advisory Committee, Department of Commerce Emerging Technology and Resear	rch 2008-2010	
Scientific Advisory Board, Willow Garage, Palo Alto, CA	2008-2013	
Scientific Advisory Board, Evolution Robotics, an Idealab! Company, Pasadena, C	A 2002-2007	
Review Board, NSF/NASA World Technology Evaluation Center (WTEC)		
International Assessment of R&D in Robotics	Apr-Jul 2004	
Executive Council, Association for the Advancement of Artificial Intelligence		
(AAAI) Aug	2002-Jul 2005	
Academic Advisory Board, Center for Neuromorphic System Engineering,		
	2002-Oct 2005	
Scientific Advisory Board, Artificial Life VII Conference	2000	
ISAT Study, DARPA "Robot Ecologies"	Feb 1999	

Committees

ACM Allan Newell Award Committee 2022-present IEEE Computational Intelligence Society Autonomous Mental Development Technical Committee (AMD TC) Apr 2004-present **AAAS Steering Group** 2017-2022 **AAAI Fellows Nominating Committee** Aug 2017-2020 **AAAS Fellow Nominating Committee** 2010-2014 IEEE Robotics and Automation Society Fellow Nominating Committee 2011-2012 **IEEE Fellows Nominating Committee** 2011 CCC AI Working Group July 2018-2020 CCC Health and Human-Computer Interaction July 2016- July 2019 National Robotics Roadmap Committee 2007-2020 AAAI Robot Competition and Exhibition Steering Committee Aug 2007-Jun 2008 Chair, AAAI Executive Council, Grants Committee Nov 2004-Feb 2006 IEEE Robotics and Automation Technical Committee on Online Robots 2002-09

Society Memberships

Fellow, American Association for the Advancement of Science (AAAS)

Fellow, Institute of Electrical and Electronics Engineers (IEEE)

Fellow, Association for the Advancement of Artificial Intelligence (AAAI)

Fellow, American Association of Computing Machinery (ACM)

Fellow, IEEE Robotics and Automation Society (RAS)

Member, American Society for Engineering Education (ASEE)

Member, International Society for Adaptive Behavior (ISAB)

Journal Editing

Current:

Member, advisory board, *Harvard Data Science Review*Development editor, *ACM Transactions on Human-Robot Interaction*Member, international advisory board, *International Journal of Social Robotics*2010-present

Past:

Editorial board member, Journal of Social Robotics	2007-2015	
Editorial board member, Artificial Intelligence Journal	Jan 2007-2015	
Editorial advisory board member, Int. Journal of Advanced Robotic Systems	2004-2012	
Editorial board member, Int. Journal of Autonomous Agents and Multi-Agent	<i>Systems</i> 2000-10	
Associate editor, Int. Journal of Humanoids Robotics	Jul 2003-2009	
Associate editor, IEEE Transactions on Robotics and Automation	Jun 2001-Sep 2003	
Editorial board member, Journal of Artificial Intelligence Research (JAIR)	1999-2001	
Associate editor, Adaptive Behavior Journal	1995-2005	
Guest co-editor (with Adriana Tapus), special issue of Autonomous Robots on "Socially Assistive		
Robotics"	Sep 2007	

Guest co-editor (with Adriana Tapus), special issue of *Intelligent Service Robotics* on "Multidisciplinary Collaboration for Socially Assistive Robotics" Dec 2007

- Guest co-editor (with Gaurav Sukhatme), special issue of *The Communications of the ACM* on "Emerging Directions in Robotics" Mar 2002
- Guest co-editor (with Henry Hexmoor), joint special issue of *Autonomous Robots* 5(3-4) and *Machine Learning* 31(1-3), on "Learning in Autonomous Robots" Jul/Aug 1998
- Guest editor, special issue of *Adaptive Behavior Journal* on "Complete Agent Learning in Complex Environments" 5(3-4) Winter/Spring 1997
- Editorial board member, special issue of the *Journal of Robotics and Autonomous Systems* on "Robot Learning: The New Wave" 1998
- Editorial board member, special issue of the *Cognitive Systems Research Journal* on "Situated and Embodied Cognition" 2001

Organizing Committees

Honorary Chair, IEEE RO-MAN Conference, Los Angeles, 2024

Area Chair, AAAI 2020 Conference, New York, NY, Feb 7-12, 2020.

Chair, US Robotics Roadmapping Workshop, Los Angeles, CA, Oct 17-18, 2019.

Co-Chair, US-Japan Future Directions Workshop on AI Joint Steering Committee, May 2019-Mar 2020

Sponsors and Exhibitors Co-Chair, ICRA 2015, Seattle, WA, May 26-30, 2015.

Co-Organizer (with L. Takayama, B. Scassellati, and C. Jenkins), Human-Robot Interaction Workshop, *Robotics Science and Systems Conference (RSS-2011)*, Los Angeles, CA, Aug 1, 20011

General Chair ICRA 2008, Pasadena, CA, 2008.

Co-Organizer (with A. Tapus, M. Michalowski, S. Sabanovic, C. Breazeal, F. Michaud, R. Simmons, K. Dautenhahn, C. DiSalvo and I. Nourbakhsh), *AAAI 2007 Spring Symposium* Multidisciplinary Collaboration for Socially Assistive Robotic, Mar 2007.

Co-chair (with Adriana Tapus), *Robotics: Science and Systems* Workshop on Socially Assistive Robotics, Philadelphia, PA, Aug 19, 2006.

Region Co-chair and Steering Committee Member, *ICRA 2005*, Barcelona, Spain, Apr 17-23, 2005.

Chair, Travel Grants Committee, ICRA 2005, Barcelona, Spain, Apr 17-23, 2005.

Committee Member, RCV'03: First NSF PI Workshop on Robotics and Computer Vision, *IROS-2003*, Oct 26-27, 2003.

Robotics Chair, Autonomous Agents 2001, Montreal, Canada, May 28 - Jun 1, 2001.

Area Chair (Robot Learning Track), *Int. Conference on Machine Learning ICML-2000*, Stanford, CA, Jun 29-July 2, 2000.

Area Chair (Physical Agents Track), Autonomous Agents '98, Minneapolis, May 10-13, 1998.

Co-chair (with Stefan Schaal and Chris Atkeson), *Neural Information Processing (NIPS-97)* Workshop on Imitation Learning, Breckenridge, CO, Dec 6, 1997.

Chair, AAAI-96 Fall Symposium on Embodied Cognition and Action, MIT, Nov 9-11, 1996.

Local Organizer (with Jordan Pollack), 4th Int. Conference on Simulation of Adaptive Behavior (*SAB-96*), Cape Cod, Sep 9-13, 1996.

Program Chair, AAAI-96 Student Abstract and Poster Program, Portland, OR, Aug 4-7, 1996.

Program Chair, Symposium on Learning in Complex Environments: Biological and Artificial

Adaptive Behavior, 18th Annual Conference of the Cognitive Science Society, San Diego, CA, Jul 12-15, 1996.

Program Co-chair (with S. Giszter, T. Sanger, and S. Schaal) of five "Biological and Artificial Motor Systems" (BAMS) workshops, held at the Brandeis U. Volen Center for Complex Systems on Jan 14, Mar 30, Jun 15, Dec 14, 1996, and Apr 22, 1997.

Co-chair (with David Cohn) NIPS-95 Robot Learning Workshop, Vail, CO, Dec 1, 1995.

Committee member, NATO ASI-AA Course on Practice and Future of Autonomous Agents, Monte Verita, Switzerland, Sep 23-Oct 1, 1995.

Session Organizer, *IEEE/RSJ Int. Conference on Intelligent Robots and Systems (IROS-95)*Collective and Cooperative Robots session, Pittsburgh, PA, Aug 5-9, 1995.

Senior Program Committees

34th AAAI Artificial Intelligence (AAAI-2020), New York, NY, Feb 7-12, 2020.

22nd Int. Conference on Artificial Intelligence (AAAI-2007), Vancouver, BC, July 22-26, 2007.

Int. Conference on Machine Learning (ICML 2006), Carnegie Mellon University, Pittsburgh, PA, Jun 25-29, 2006.

Fifth Int. Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2006), Hakodate, Japan, May 8-12, 2006.

Second Int. Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2003), Sofitel, Melbourne, Australia, July 14-18, 2003.

First Int. Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2002), Bologna, Italy, Jul 15-19, 2002.

Program Committees

Robotics: Science and Systems (RSS-2015), Rome, July 13-17, 2015.

Human-Robot Interaction Pioneer Workshop (HRI-2013), Tokyo, Japan, March 3, 2013.

Human-Robot Interaction (HRI-2008), Amsterdam, March 12-15, 2008.

Human-Robot Interaction (HRI-2007), Arlington, VA, March 9-11, 2007.

AAAI-06 Nectar Track, Boston, MA, July 16-20, 2006.

Human-Robot Interaction (HRI-2006), Salt Lake City, Utah, March 2-3, 2006.

Robotics: Science and Systems, MIT, MA, June 8-11, 2005.

AAAI-04, San Jose, CA, July 25-29, 2004.

2nd Int. Conf. on Development and Learning (ICDL'02), Cambridge, MA, Jun 13-15, 2002.

IROS-2001, Maui, Hawaii, Oct 2001.

Humanoids-2000, 1st IEEE-RAS Int. Conf. on Humanoid Robots, Cambridge, Sep 7-8, 2000.

Simulation of Adaptive Behavior 2000, Paris, France, 11-15 Sep, 2000.

Autonomous Agents 2000, Barcelona, Spain, Jun 3-7, 2000.

6th Intelligent Autonomous Systems Conference (IAS-6), Venice, Italy, July 2000.

IEEE Int. Symposium on Computation Intelligence in Robotics & Automation (CIRA-99), Monterey, CA, Nov 1999.

AAAI-99, Orlando, FL, Jul 18-22, 1999.

Autonomous Agents '99, Seattle, WA, May 1-5, 1999.

AAAI-98, Madison, WI, Jul 26-30, 1998.

ICML-98, Madison, WI, Jul 24-26, 1998.

SAB-98, Zurich, Switzerland, Aug 17-21, 1998.

IEEE Int. Symposium on Intelligent Control and Computational Intelligence in Robotics and Automation (ISIC/CIRA/ISAS-98), Gaithersburg, Ml, Sep 14-17, 1998.

SPIE Sensory Fusion and Decentralized Control in Autonomous Robotic Systems, Pittsburgh, PA, Oct 14-17, 1997.

Autonomous Agents '97, Marina del Rey, CA, Feb 5-8, 1997.

IJCAI-95 workshop on "Adaptation and Learning in Multi-Agent Systems," Montreal, Canada, Aug 19-21, 1995.

SAB-96, Cape Cod, Sep 9-13, 1996.

AAAI-96, Portland, OR, Aug 4-7, 1996.

SIGART/AAAI-96 Doctoral Consortium, Portland, OR, Aug 4-7, 1996.

AISB-96, AI Society of Britain workshop on "Learning in Robots and Animals," U. of Sussex, Brighton, UK, Apr 1-2, 1996.

IROS-96, Japan, 1996.

ECAL-95, 3rd European Conference on Artificial Life, Granada, Spain, Jun 4-6, 1995.

ICML-94 Robot Learning workshop, New Brunswick, NJ, Jul 10-13, 1994.

SAB-94, Brighton, UK, Aug 8-12, 1994.

PerAc-94, From Perception to Action, 1st Int. Conf., Lausanne, Switzerland, Sep 7-9, 1994.

Tutorials

"Human-Robot Interaction and Socially Assistive Robotics", IEEE 3rd Summer School on Cognitive Robotics (Jul 2019), "Behavior-Based Robotics" with Ron Arkin, at IROS-01 (Oct 01), ICRA-00 (Apr 24-28, 2000), IJCAI-99 (Aug 1999, presented by Ron Arkin), AAAI-99 (Jul 1999), and Agents-99 (May 1999).

Mentoring

Mentor, 14th ACM Int. Conference on Multimodal Interaction (ICMI-2012) Doctoral Consortium, Santa Monica, CA, Oct 22, 2012.

Judging

Judge, *Discover Magazine* Awards for Technological Innovation, Feb 1998, and Feb 1999. Robot Contest Judge, *AAAI-92*, San Jose, CA, Jun 1992.

Reviewing

National Institutes of Health Biomedical Computing and Health Informatics (BCHI) Study Section member (Sep 2013-Aug 2016)

Granting Agencies: NSF · NIH · ONR · Austrian Science Fund · Human Frontier Science Program · Engineering and Physical Sciences Research Council, UK · Israel Science Foundation · NSERC CRSNG, Canada · Swiss National Science Foundation

Journals: Adaptive Behavior · Artificial Intelligence · Artificial Life · Autonomous Robots ·

Cognitive Science · IEEE Transactions on Robotics and Automation · International Journal of Robotics Research (IJRR) · Journal of AI Research (JAIR) · Journal of Experimental and Theoretical AI (JETAI) · Journal of Robotic Systems · Transactions on Neural Systems & Rehabilitation Engineering · Machine Learning · Physica D · Science · Science Robotics . Robotics and Autonomous Systems

Publishers: MIT Press · Cambridge University Press · Kluwer Academic Publishers · National Academies Press · Prentice Hall

Conferences: American Association for Artificial Intelligence National Conference (AAAI) · Int. Conference on Machine Learning (ICML) · Artificial Life Conference (Alife) · ASME Design Automation Conference · Cognitive Science Society Conference · IEEE Int. Conference on Robotics and Automation (ICRA) · IEEE/RSJ Int. Conference on Intelligent Robots and Systems (IROS) · Int. Joint Conference on Artificial Intelligence (IJCAI) · Int. Conference on Simulation of Adaptive Behavior (SAB) · Neural Information Processing Systems (NIPS) · Robotics: Science and Systems (RSS)

Service to the University

Member, Public Health Policy Advisory Group	2020-2022	
Founding Director, Center for Robotics and Embedded Systems (CRES),		
now Robotics and Autonomous Systems Center (RASC)	Fall 2002-present	
Member, Lead of Advancement Search Committee, Viterbi School	Fall 2021	
Chair, Project Restart Research Working Group	May 2020-Aug 2021	
Chair, Project Restart Contract Tracing Working Group	May 2020-Aug 2021	
Chair, Research Council	Jan 2020-Jul 2021	
Chair, Innovation Council	Sep 2020-Jul 2021	
Chair, Research Data Council	Apr 2021-Jul 2021	
Chair, Graduate Student Support Working Group	April – June 2020	
Chair, Strategic Plan Funding Committee on Transformation	Aug 2019-Mar 2020	
Internal Board Member, USC Elyn Saks Institute	2010-2019	
Faculty Advisor, USC Socially Intelligent Robot Characters Society	2014-2018	
Faculty Advisor, USC chapter of AAAI	2012-2014	
Member, University Committee on Appointments, Promotions, and Tenure Sep 2009-Aug 2013		
Member, University Advisory Committee to the Prostdoctoral Programs	Office 2012-2015	
Member, University Strategic Planning Subcommittee on Graduate Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Programmer Pro		
Member, University Committee on Tenure & Privileges Appeals	Sep 09-Aug 2010	
Executive Steering Committee Member, Mellon Mentoring Forum	2007-2015	
Faculty Observer, Academic Affairs Committee of the USC Board of Trustees Sep 07-May 08		
Member, Board of Directors, University Club	May 2007- May 2009	
Member, University Strategic Planning Committee	Jan 2007-May 2009	
Member, Academic Senate Nominating Committee	Jan-Apr 2007	
President, Academic Senate and Faculty	Jul 2006-Jun 2007	
Member, USC Neuroscience Program Steering Committee	Sep 2006-May 2007	
President-Elect, Academic Senate	Fall 2005-Jun 2006	
Member, USC University Research Committee	Aug 2005-May 2007	

Chair, Viterbi School of Engineering Women in Science and Engineering Chair, Academic Senate Nominating Committee Member, Viterbi School of Engineering Dean Search Committee Co-Chair, USC Provost's Research Subcommittee Co-Chair, USC Research Administration Task Force Member, USC Accreditation Steering Committee Member, Academic Senate Executive Board Co-chair, Provost's Strategic Planning Subcomm. on the Graduate Semina University Committee on Academic Review (UCAR) Subcomm. on Interest	Jan-May 2006 Aug 2005-Apr 2006 Sep-Nov 2005 Dec 2005-May 2006 Jul 2005-Jun 2006 May 2005-Jun 2008 ars Feb-Jun 2005
Member, Provost's Strategic Planning Internal Organization Subcommitte Member, W.V.T. Rusch Engineering Honors Program Advisory Board Member, School of Engineering Women in Science & Engineering (WiSE	e Fall 03-Spring 2005 2000-01, 03-05 E) Faculty Committee
Member, Annenberg Center Core Faculty Group Member, Special Committee on Promotion and Tenure Policy Member, Brandeis University Curriculum Committee Member, Brandeis University Science Library Committee Cluster Convener, Brandeis University Cluster Committee Member, Brandeis University Board on Student Conduct First-Year General Advisor, Brandeis University	Fall 2003-Spring 05 Mar 2002-03 2001-02 1996-97 1996-97 1995-96 1995-96
Student and Faculty Development Preparing for an Academic Position Panels for PhD students and postdocs NSF Career Grant Internal Review How to Do Research Successfully at USC workshop for new faculty Research Topics Database	annually 2007-2019 annually 2007-2019 annually 2006-2019 2008-2019
Interdisciplinary Research-Seeding Workshops and Retreats Engineering and Medicine Retreat, Huntington Beach Engineering and Communications Collaboration Workshop, USC Engineering and Social Work Workshop, USC Engineering and Gerontology retreat on Digital Aging, USC Viterbi School of Engineering Research Retreats	Oct 17-19, 2008 May 11, 2010 Apr 23, 2013 Apr 9, 2013 annually 2007-2019
Service to the Department	
Chair, Diversity, Equity, and Inclusion (DEI) Committee Member, CS Department Chair Search Committee Chair, Intelligent Systems Group, CS Dept. Organizer, CS Robotics Research web resources Member, CS Chair Search Committee Commencement Marshall Chair, Salvatori Remodeling Committee CS Dept. Representative, USC Engineering Faculty Council Member, Embedded Databases Faculty Search	Fall 2022-Spring 2023 Spring 2022 2001- 2002 2002 Spring 2001 2001 Jan-Sep 2001 1999-2001 Spring 2000

Organizer, MS Program in Intelligent Robotics	1999-May 2000
Chair, Salvatori Remodeling Committee	Jun-Nov 1999
Member, Faculty Merit Review Committee	1999
Co-Organizer, USC CS Seminars and Distinguished Lecture Series Spring	2000
CS Dept. Representative, USC Engineering Faculty Council	1997-1999
Director, CS Dept. Seminar Series, Brandeis University	Jan 1995-May 1996
Organizer, Revolving Seminar Series, MIT AI Laboratory	1990-1991
Organizer, MIT AI Laboratory AI Olympics	1990
Captain, MIT AI Laboratory Robot Building Contest	1989
Captain, MIT AI Laboratory AI Olympics	1988

TECHNOLOGY TRANSFER

Founded *Embodied, Inc.*, a robotics company developing socially assistive companion robots for the consumer market, and served as its Chief Science Officer (August 2016 to November 2018). Embodied raised \$4.2M in seed funding from Intel, Osage University Partners, Amazon, and Hive in spring 2016. Embodied opened in Pasadena, CA in August 2016, then raised \$22M in Series A funding from Calibrate Ventures, Jazz Ventures, Sony, Intel, Osage, Toyota, and Amazon in Spring 2018. As of May 2021, Embodied has raised over \$44M in venture backing. Embodied, Inc. launched Moxie, an in-home robot for child development, in May 2020, and raised another round of financing.

Since 2007, worked closely with community partners, including Rancho Los Amigos National Rehabilitation Center, the Help Group, Children's Hospital Los Angeles, BeGroup, and Front Porch, on deploying socially assistive robots for real-world rehabilitation, education, and eldercare.

PERSONAL

Citizenship: US Gender: Female

Security clearance 2008-2010