

Jonathan Gratch

Institute for Creative Technologies
Department of Computer Science
University of Southern California
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Research Interests

Artificial Intelligence, cognitive science, emotion modeling, planning, multi-agent systems.

Education

Ph.D. in Computer Science, University of Illinois, June 1995
Thesis: On Efficient Approaches to the Utility Problem in Adaptive Problem Solving
DOCTORAL COMMITTEE: G. F. DeJong (Chair), J. I. Marden, L. B. Pitt, L. A. Rendell, M. J-P. Shaw

M.S. in Computer Science, University of Illinois, May 1993.
B.A. magna cum laude in Computer Science, University of Texas at Austin, May 1986.

Professional Experience

Institute for Creative Technologies, University of Southern California
Director and Research Professor of Computer Science and Psychology. Head a group researching techniques for incorporating emotions, personality, and story into virtual training environments.
September 2013 - Present

Institute for Creative Technologies, University of Southern California
Associate Director and Research Associate Professor of Computer Science and Psychology.
November 2012 – September 2013

Institute for Creative Technologies, University of Southern California
Associate Director and Research Associate Professor of Computer Science
March 2007 – November 2012

Institute for Creative Technologies, University of Southern California
Project Leader and Research Associate Professor of Computer Science
July 2006 – March 2007

Institute for Creative Technologies, University of Southern California
Project Leader and Research Assistant Professor of Computer Science
June 2000 - July 2006

Information Sciences Institute, University of Southern California
Computer Scientist and Research Assistant Professor of Computer Science
Performed research and development into real-time planning techniques, multi-agent cooperative behavior, and behavioral modeling learning.
August 1995 - June 2000

Beckman Institute, University of Illinois at Urbana-Champaign
Research Assistant. Developed machine learning techniques for acquiring problem solving heuristics - research lead to significant problem solving improvements on the Deep Space Network scheduling system, a real-world scheduling application, and in several planning domains. Focused on both theoretical analysis of these learning techniques and their application to practical industrial problems.
Fall 1989 - July 1995

Jet Propulsion Laboratory, California Institute of Technology
Research Consultant. Worked on learning approach for the Deep Space Network scheduling project.
July 1992 - October 1992, February 1993, September 1994

University Service

Committees:

Graduate Student Assistantship Committee (2000-2003; 2011-2014)
Research Faculty Merit Committee (Chair, 2007; 2015)
Committee for Research Faculty Applications (2007-2008)

Courses:

CS534: Affective Computing (developed), Spring 2007, Spring 2009, Fall 2011, Spring 2014, Fall 2015, Fall 2017
CS541: Artificial Intelligence Planning, Fall 2000
CS593: Autonomous Learning and Discovery Agents, Fall 1997

Graduate Students:

Wenji Mao, PhD 2006
Thesis: Modeling Social Causality and Social Judgment in Multi-agent Interactions
Anna Okhmatovskaia, M.S. 2006
Hyeoksoo Kim, PhD 2008

Thesis: A Planner-Independent Approach to Human-Computer Interactive Planning
Celso de Melo, PhD 2012
Thesis: The Interpersonal Effect of Emotion in Decision-making and Social Dilemmas
Lixing Huang, PhD 2013
Thesis: Parasocial Consensus Sampling: Modeling Human Nonverbal Behaviors from Multiple Perspectives
Zahra Nazari, PhD 2017
Thesis: Automated Negotiation with Humans
Johnathan Mell
Emmanuel Johnson
Rens Hoegen
Su Lei

Dissertation Committees:

Lixing Huang (USC), Chair
Celso de Melo (USC), Chair
Hyeoksoo Kim (USC), Chair
Wenji Mao (USC), Chair
Sejin Oh (GIST Korea), Member
Ahyoung Choi (GIST Korea), Member
Ning Wang (USC), Member
Abe Kazemzadeh (USC), Member
Jina Lee (USC), Member
Marc Sparagen (USC), Member
Nan Jing (USC), Member
Henriette van Vugt (Vrije Universiteit), Member
Mei Si (USC), Member
Brent Lance (USC), Member
Robert Marinier (University of Michigan), Member
Evan Drumwright (USC), Member
Erdan Gu (University of Pennsylvania), Member
Janusz Marecki (USC), Member
Young-jun Kim (USC), Member
Matheen Siddiqu (USC), Member
Dusan Jan (USC), Member
Derya Ozkan (USC), Member
Rong Yang (USC), Member
James Pita (USC), Member
Jonathan Ito (USC), Member
Jerry Lin (USC), Member
Elnaz Nouri (USC), Member
Thanh Nguyen (USC), Member
Matthew Brown (USC), Member
Sunghyun Park (USC), Member

Joan Wang (Rochester), Member
Goncalo Periera (Universidade de Losboa), Member
Zhaojun Yang (USC), Member
Jeroen de Man (Vrije Universiteit), Member
Katelyn Swift-Spong (USC), Member
Saba Khashe (USC), Member
Eunkyung Kim (USC), Member
Naveen Kumar (USC), Member
Roshni Raveendhran (USC), Member
Laura Garcia (USC), Member
Aaron Schlenker (USC), Member
Sara McCarthy (USC), Membe

Post-doctoral Training

Ahyoung Choi, PhD Computer Science
Celso de Melo, PhD Computer Science
Sin-Hwa Kang, PhD Communications
Peter Khooshabeh, PhD Psychology
Gale Lucas, PhD Psychology
Wendy Treynor, PhD Psychology
Ning Wang, PhD Computer Science

Visiting Students / Researchers Trained

Sanne van Waveren, University of Twente, 2016
Clara Peters, University of Duisburg-Essen, 2016
Lilly-Marie Leisse, University of Duisburg-Essen, 2016
Lisa-Sophie Tasch, University of Duisburg-Essen, 2016
Shari Lieblich, Temple University, 2015
Danielle Shore, Oxford University, 2015
Rens Hoegen, University of Twente, 2014-2016
Eli Fessler, Pomona College, 2014
Mohammad Shayganfar, Worcester Polytechnic Institute, 2014
Jeroen van Vroonhoven, University of Twente, 2014
Mathieu Gregorie, Laval University, 2013
Aisha King, Bard College, 2013
Peiyun Hu, Tsinghua University, 2013
Lea Schmidt, University of Duisburg-Essen, 2013
Joan Wang, RPI, 2013
Gina Reuther, University of Duisburg-Essen, 2012
Guillaume Cosnard, French Military Academy, 2012
Emilie Lostaine, French Military Academy, 2012
Dimitrios Antos, Harvard, 2012
Andy Smith, NCSU, 2012
Ahyoung Choi, GIST Korea, 2011
Bilge Karacora, University of Duisburg-Essen, 2011
Sylwia Hyniewska, Telecom ParisTech, 2011

Wim van der Ham, Twente, 2010
Philip Kulms, University of Duisburg-Essen, 2010
Tyler Baldwin, Michigan State University, 2010
Jennifer Talevich, USC, 2010
Jana Appel, University of Duisburg-Essen, 2010
Birgit Endrass, University of Augsburg, 2009
Astrid von der Puttin, University of Duisburg-Essen, 2009
Sejin Oh, GIST Korea, 2007
Francois Courbier, French Military Academy, 2006
William Rious, French Military Academy, 2006
Mark ter Maat, University of Twente, 2006
Corne Versloot, University of Twente, 2006
Rick van der Wirt, University of Twente, 2005
Arien Kock, University of Twente, 2004
Martin Maatman, Twente, 2004
Timon Mueler, Twente, 2003

Grants and Contracts

Strategic Emotions for Leader Development, ARL (2014-2017), \$1,719,192, PI
Virtual Human Assessment: Developing a theory for how human-like traits benefit (or harm) human-machine interaction, ARL (2014-2017), \$1,445,792, PI
EAGER: Constructing Trust and Rapport between Built Environments and Their Users Through Relational Elements. NSF, (2015-2017), \$250,000, Co-PI
Rapport with artificial agents. Honda Research Institute (2015-2016), \$100,000, Co-PI
Modeling Interpersonal Trust and Conflict: a Dynamic Systems Perspective. ARL, (2015-2016), \$300,000. PI
Social Function of Emotions: Modeling and Exploiting the Social Function of Emotions in Mixed Human-Machine Teams, AFOSR (2015-2018), \$1,255,373, PI
Communicating appraisals and social motives (CASM): Interpersonal effects of regulated and unregulated emotion expression, NSF ORA (2014-2016), \$300,000, PI
Exploring the Implications of Virtual Human Research for Human-Robot Teams, Army Research Laboratory HRED (2013-2014), \$100,000, PI
Achieving the Interpersonal Function of Emotion in Human-Machine Collaboration, NSF SoCS (2012-2015), \$749,969.00, PI
Detection and Computational Analysis of Psychological Signals: Evaluation and Assessment. DARPA (2011-2013), \$626,423, PI
Detection and Computational Analysis of Psychological Signals. DARPA (2011-2013), \$4,330,111, Co-PI
HCC: Small: Learning by Explaining to a Virtual Human, NSF (2009-2012), \$496,000, PI
Validating a computational model of emotion's consequences for decision-making, AFOSR, \$933,000 (2009-2012), Co-PI
Stress and Emotion Project, U.S. Army RDECOM (2009), \$826,493, PI
MAJOR: Collaborative Research: Modeling Creative and Emotive Improvisation in Theatre, NSF (2008-2010), Senior personal
Virtual Humans in Kinetic Environments, USC/ICT, \$500,000 (2008), PI

Is rapport in the eye, ear, or mind of the beholder? Phase 2. U.S. Army RDECOM (2008), \$100,000, PI
HCC: Building Rapport with Virtual Humans, NSF (2007-9), \$450,000, PI
Collaborative Research—Dyadic rapport within and across cultures: Multimodal assessment of human-human and human-computer interaction, NSF (2007-2009), \$650,000, Co-PI
Quantifying the Human Interactional Efficacy of Advanced Virtual Human Agents for Training, U.S. Army RDECOM, \$116,000 (2008), PI
Is rapport in the eye, ear, or mind of the beholder? U.S. Army RDECOM (2007), \$100,000, PI
Modeling and Validating Emotion's Impact on Cognition, AFOSR, \$840,000 (2006-08), Co-PI
SocSim, Bavaria California Technology Center (2006), \$4000, Co-PI
Stress and Emotion Project, U.S. Army RDECOM (2006-7), \$1,775,000, PI
Virtual Human Rapport, U.S. Army RDECOM, (2006) \$100,000, PI
HUMAINE Network on Emotion and Man-machine Interaction, EU, \$20,000 (2005-7), Co-PI
Stress and Emotion Project, U.S. Army RDECOM, \$867,000 (2005), PI
Stress and Emotion Project, Army Research Office, \$800,000 (2004), PI
Workshop on Perceptive Animated Interfaces and Virtual Humans, NSF, \$40,000, 2003, Co-PI
Stress and Emotion Project, Army Research Office, \$580,000 (2003), PI
Stress and Emotion Project, Army Research Office, \$398,000 (2002), PI
Emotional Synthetic Forces, Army Research Institute, \$294,000 (1997-2000), PI

Honors and Professional Activities

Editorial Board:

Editor-in-Chief (founding), IEEE Transactions on Affective Computing (2010-2014) –
Impact factor on departure: 3.467
Associate Editor, Emotion Review (2007-)
Associate Editor, Journal of Autonomous Agents and Multiagent Systems (2010-)
Guest Editor, IEEE Intelligent Systems, special issue on Social and Economic Computing

Elected Office:

Steering Committee Chair, IEEE Transactions on Affective Computing (2015-2017)
President, HUMAINE Association (2009-2011)
President Elect, HUMAINE Association (2007-2009)
Executive Committee Member, HUMAINE Association (2007-2013)

Program Chair or Co-Chair:

Affective Computing Pre-Conference at Society for Affective Science, Co-Chair 2017
International Joint Conference on Artificial Intelligence, Area Chair, 2016-2017
Affective Computing and Intelligent Interaction Conference, Program Chair, 2015
International Workshop on Emotion Representations and Modelling for Human-Computer Interaction Systems, Co-Chair 2013

Affective Computing and Intelligent Interaction Conference, Demo Chair, 2009
Affective Computing and Intelligent Interaction Conference, Tutorial Chair, 2007
Workshop on rapport and social emotions, Chair, 2007
International Workshop on Modeling the Cognitive Antecedents and Consequences of Emotion, Co-chair, 2006
International Conference on Intelligent Virtual Agents, Chair, 2006
International Working Conference on Intelligent Virtual Agents, co-chair, 2006
International Workshop on Virtual Humans: Design Criteria, Techniques and Case Studies for Creating and Evaluating Interactive Experiences, Workshop Co-chair, 2004
Workshop on Accelerating Progress in Perceptive Animated Agents and Virtual Humans, Workshop Co-chair, 2004
International Workshop on Virtual Humans, Workshop Co-chair, 2002
19th International Soar Workshop, Workshop Chair, 2000

Senior Programming Committee Member:

International Conference on Autonomous Agents and Multiagent Systems (2010,2013-2017)
AAAI Conference on Artificial Intelligence (2015, 2016, 2017)
International Conference on Intelligent Virtual Agents (2014, 2015)
International Conference on Multimodal Interaction (2014, 2015)
International Conference on Autonomous Agents and Multiagent Systems, Challenges and Visions Track (2014)
International Joint Conference on Artificial Intelligence (2013)
International Conference on Affective Computing and Intelligent Interaction (2013)
International Conference on Automatic Face and Gesture Recognition (2013)
International Conference on Intelligent Virtual Agents, Organizing Committee (2006-)
Conference on Behavioral Representation in Modeling and Simulation (2007)
International Conference on Virtual Storytelling (2003)
National Conference on Artificial Intelligence (1998)

Program Committee Member:

International Association of Conflict Management (2015)
Cognitive Science Conference (2004, 2014)
AAAI Fall Symposium on Integrated Cognition (2014)
International Workshop on Context Based Affect Recognition (2012)
International Conference on Intelligent Virtual Agents (2012)
International Conference on Affective Computing and Intelligent Interaction (2011)
International Society for Research on Emotions (2011)
International Workshop on Human Behavior Recognition (2010)
Workshop on Specification and Computation of Affect in Collaborative and Social NETWORKS (2009)
International Symposium on Ubiquitous Virtual Reality (2008-2009)
International Workshop on Social Computing (2008)
Cognitive Science Conference, Prize Committee (2007)
International Conference on Cognitive Modeling (2007)

International Society for Gesture Studies (2007)
International Conference on Autonomous Agents and Multiagent Systems (2002-2008)
National Conference on Artificial Intelligence (1996, 1997, 1998, 2004, 2006, 2010)
Workshop on Perception and Interactive Technologies (2005, 2006)
International Conference on Affective Computing and Intelligent Interaction (2005)
Portuguese Conference on Artificial Intelligence (2005)
Conference on Behavior Representation in Modeling and Simulation (2003)
Conference on Computer Animation and Social Agents (2003)
International Conference on Autonomous Agents (2001)
International Conference on Virtual Storytelling (2001)
International Conference on Artificial Intelligence Planning Systems (2000)
International Joint Conference on Artificial Intelligence (1997)
International EMCSR Symposium on Affective Computational Entities (2004)
IUI workshop on Affective Interactions (2005)
Workshop on Human-like Intelligent Interfaces (2004)
Workshop on Affective Dialogue Systems (2004)
AAAI Spring Symposium on Emotion Architectures (2004)
Workshop on Affective and Attitude User Modeling (2003)
International Working Conference on Intelligent Virtual Agents (2003)
Florida Artificial Intelligence Research Symposium (1998)

Reviewer:

NIH Study Section (2016-2017)
CHI (2017)
CHI Play 2016
Emotion Review (2015-2016)
PlosOne (2016)
Dutch National Science Foundation (2010, 2013, 2016)
AI Magazine (2015)
IEEE Transactions on Affective Computing (2011,2015)
International Conference on Human Robot Interaction (2015)
Frontiers in Psychology (2015)
United States – Israel Binational Science Foundation (2015)
International Conference on Multimodal Interaction (2015)
Journal of Human Computer Interaction (2014)
Journal of Computer Science and Technology (2014)
Air Force Office of Scientific Research (2009-2014)
Social Psychological and Personality Science (2011, 2014)
Cognitive Science (2009, 2013)
Portuguese NSF (2012)
NIH/NIDA (2012)
IEEE Transactions on Autonomous Mental Development (2012)

Journal of Experimental Social Psychology (2011)
Psychophysiology (2011)
Transactions of Affective Computing (2011)
Transactions on Interactive Intelligent Systems (2011)
Autonomous Robotics (2010)
Oxford University Press (2010)
NSF Review Panel, Social-Computational Systems (2010)
NSF Career Award (1998, 2009)
Transactions on Vision and Computer Graphics (2009)
Journal of Brazilian Computer Society
European Science Foundation, Committee for the Social Sciences (2009)
Air Force Office of Scientific Research (2009)
International Journal of Human-Computer Studies (2009)
Artificial Intelligence Journal (2007, 2008)
Journal of Autonomous Agents and Multi-agent Systems (2008)
Adaptive Behavior (2008)
NSF Review Panel, CreativeIT program (2007)
Language and Speech (2007)
Journal of Natural Language Engineering (2007)
Cognition and Emotion (2006)
Transactions in Robotics (2006)
International Journal of Humanoid Robotics (2005, 2006)
Journal of Computer Science Technology (2006)
Eurographics (2005)
Journal of Cognitive Systems Research (2004, 2006)
Journal of Artificial Intelligence Research (2003, 2004)
AI Magazine (2002)
Journal of Visualization and Computer Animation (2002)
User Modeling and User-Adapted Interaction: An International Journal
(special Issue on User Modeling and Intelligent Agents. (2001)
IEEE Transactions on Systems, Man, and Cybernetic (special issue on
"Socially Intelligent Agents - The Human in the Loop"), 2001
Machine Learning Journal (1996)
Journal of Artificial Intelligence Research (1996)
Journal of Decision Support Systems (1995)
Annals of Operation Research (1995)
National Conference on Artificial Intelligence Student Program (1994)
European Conference on Artificial Intelligence (1994)
Third International Workshop on Knowledge Compilation and Speed-up
Learning (1993)

Miscellaneous:

National Academy of Sciences (NRC): Committee member for study on the context of
military environment: social and organization factors (2013)
International Joint Conference on Artificial Intelligence (IJCAI), Local Arrangements
Committee, 2009

National Academy of Sciences (NRC): Committee member for study on Opportunities in Basic Research in the Behavioral and Social Sciences for the US Military
Invited Research Fellow, Center for Advanced Media Research Amsterdam, Free University Amsterdam (Summer, 2008)
US Joint Forces Command Study on Large-Scale Joint Experimentation Enabled by Scalable Parallel Processor Computing
DARPA ISAT study on Mixed-Initiative Control and Monitoring within Human-Bot Systems, 2001
Advisory Board Member, UCLA Center for Computational Social Science
Soar Advisory Board Member
Senior Member of IEEE
Member of the International Society for Research on Emotions
Member of the American Association for Artificial Intelligence
Member of the HUMAINE Associate for research on emotion and human-machine interaction
Member of the Operations Research Society of America and the Institute of Management Sciences

Awards

Fellow of the Cognitive Science Society, 2017
Best Paper, 18th ACM International Conference on Multimodal Interaction, November 2016
Best Presentation, ACM SIGGRAPH Conference on Motion in Games, October 2016
Best Paper, 11th International Conference on Disability, Virtual Reality, and Associated Technologies, September 2016
Best Demo Finalist, International Conference on Autonomous Agents and Multiagent Systems, 2016
Best Demo Paper, International Conference on Affective Computing and Intelligent Interaction, 2015
Best Paper, International Workshop on Automatic Sentiment Analysis in the Wild, 2015
IEEE Computer Society Certificate of Appreciation, 2014
AAAI Fellow, 2014
UNESCO/Netexplo Award for most innovated and promising digital technologies of the year. UNESCO, Paris, 2014
IEEE Senior Member, 2014
Best Paper Finalist, International Conference on Autonomous Agents and Multiagent Systems, 2014
Best Paper, IEEE International Conference on Face and Gesture, 2013
ACM/SIGART Autonomous Agents award, 2010
Best Paper, International Conference on Autonomous Agents and Multiagent Systems, 2010
Best Paper, International Conference on Affective Computing and Intelligent Interaction, 2009
Best Paper Finalist, Intelligent Virtual Agents 2009
Best Paper, International Conference on Multimodal Interaction, 2008

Best Paper, Intelligent Virtual Agents 2008
Best Paper, Interservice/Industry Training, Simulation & Education Conference (I/ITSEC),
Emerging Concepts and Innovative Technology track, 2007
Best Paper Finalist, Intelligent Virtual Agents 2007
"Best of AAMAS" special issue article, Journal of Autonomous Agents and Multiagent
Systems, 2005
Best Paper, Autonomous Agents and Multiagent Systems 2003, Innovative Systems Track
Best Paper, Autonomous Agents Conference 2001, Software Prototype Track
Recommended Reading List, Computer Generated Forces and Behavioral Simulation
2002
Best Paper, Computer Generated Forces and Behavioral Simulation 2001,
NASA Group Achievement Award for Advanced Development for the Deep Space
Mission System, 1999

Invited Lectures, Seminars, and Colloquia:

Keynote Speaker, International Society for Research on Emotion, St. Lewis, July 2017
Panelist, Microsoft Research Faculty Summit, June 2017
Invited Seminar, Samsung Research, May 2017
Keynote Speaker, International Conference on Computer Animation and Social Agents,
Korea, May 2017
Invited Seminar, Stanford University, January 2017
Invited Colloquium, Naval Research Laboratory, Washington D.C., December 2016
Distinguished Lecture, Northwestern University, Chicago, October 2016
Invited Colloquium, University of California, Irvine, October 2016
Keynote Speaker, International Joint Conference on Artificial Intelligence, NYC, July
2016
Invited Speaker, Virtual Social Interaction Workshop, MediaCity, UK, July 2016
Invited Speaker, International Summer School in Affective Sciences, July 2016
Invited Panelist, Talkspace Clinical Conference on the Future of Therapy, NYC, April
2016
Keynote Speaker, Society for Affective Science, Chicago, March 2016
Invited Speaker, Behavioral Informatics Symposium, Vrije Universiteit Amsterdam,
February 2016
Invited Speaker, University of Lisbon, Department of Computer Science, December 2015
Invited Speaker, National Academy of Sciences, Science and Entertainment Exchange,
Los Angeles, October, 2015
Invited Panelists, Human Factors and Ergonomics Society Annual Meeting, Los Angeles,
October, 2015

Invited Speaker, International Workshop on advanced multimodal affective interaction, Beijing, China, September 2015

Invited Speaker, USC Sidney Harman Academy for Polymathic Study, Los Angeles, September 2015

Invited Panelist, International Society for Research on Emotion, Presidential Symposium, Geneva, Switzerland, July 2015

Invited Speaker, Cardiff University Department of Computer Science, June 2015

Keynote, 4th International Workshop on Human-Agent Interaction Design and Models, Istanbul Turkey, May 2015

Invited Speaker, W.V.T. Rusch Engineering Honors Colloquium, February, 2015

Keynote speaker, Army Research Laboratory Fellows Meeting, Aberdeen, MD, October 2014

Distinguished Speaker, Rutgers Center for Cognitive Science, September, 2014

Invited Panelist, the Interservice/Industry Training, Simulation and Education Conferences (IITSEC), Orlando, FL, December 2013

Invited Speaker, Georgia Tech Games@GeorgiaTech Seminar Series, November 2013

Keynote speaker, Second International Workshop on Context Based Affect Recognition, Geneva, Switzerland, September 2013

Keynote speaker, Workshop on Empathic and Emotional Agents at the International Conference on Autonomous Agents and Multiagent Systems, Valencia, Spain, June 2012

Invited Panelist, International Conference on Cognitive Modeling, Berlin, April 2012

Invited Speaker, Northwestern University Cognitive Science Seminar Series, Chicago, IL November 2011

Invited Panelist, International Conference on Affective Computing and Intelligent Interaction, Memphis, TN, October 2011

Keynote speaker, Workshop on Standards in Emotion Modeling, Lorentz Center, Leiden. August 2011

Keynote speaker, IEEE International Conference on Automatic Face and Gesture Recognition, Santa Barbara, March 2011

Keynote speaker, Summer School on Affective Computing and Social Signal Processing, Edinburgh, Scotland, August 2010

Keynote speaker, International Conference on Cognitive Modeling, Philadelphia, PA, June 2010

ACM SIGART Award Keynote, International Conference on Autonomous Agents and Multiagent Systems, Toronto, Canada, May 2010

Invited speaker, Social Science Colloquium, University of California, Santa Barbara, April 2010

Invited speaker, SCIS Colloquium Series, Florida International University, November 2009

Invited speaker, University of Maryland virtual brown bag on culture and negotiation, October 2009

Keynote speaker, International Conference on Affective Computing and Intelligent Interaction, Amsterdam, September 2009

Invited speaker, Symposium on Social Interactions in Virtual Worlds, A*STAR, Singapore, April 2009

Invited speaker, Annenberg Research Seminar, USC Communications Department, March 2009

Panel organizer and speaker, International Conference on Human-robot Interaction, March 2009

Invited speaker, ProjectOne Workshop, University of California, San Diego, December 2008

Invited speaker, AI Festival, Reykjavik University, November 2008

Panel organizer and speaker, National Communications Association, San Diego, November 2008

Carnegie Mellon University, Human Computer Interaction Institute, Seminar Speaker, October, 2008

Keynote speaker, International Symposium on Ubiquitous Virtual Reality, July 2008

Greifswald University, Department of Psychology, July 2008

Vrije University of Amsterdam, Joint colloquium for Media Psychology and Computer Science, June 2008

University of Duisburg-Essen, Department of Media and Social Psychology, June 2008

NSF Workshop on Human-Computer Interaction for 21st Century Discovery, April 2008

Future of Games Speaker Series, North Carolina State University, April 2008

National Academy of Sciences, Committee on Opportunities in Neuroscience for Future Army Applications, February 2008.

Pomona College, Computer Science Colloquium Series, December 2007

USC Conference on Emotion, Decision Making, and the Brain, August 2007

Computer Game Design Seminar, University of Applied Sciences, Augsburg, Germany, June 2007

National Academy of Sciences, Board on Army Science and Technology, Washington D.C., December 2006.

Technology and Social Behavior Speaker Series, Northwestern University, November, 2006

International Symposium on Robot and Human Interactive Communication (RO-MAN 2006), Hertfordshire, UK, Invited tutorial, September 2006

Novel Translational Research to Treat Social and Communication Deficits in Autism, Marina del Rey, CA, invited speaker, August 2006

Believable Agents Workshop, invited speaker, Marina del Rey, CA, August, 2006

International Conference on Artificial Intelligence and Interactive Digital Entertainment, Marina del Rey, CA, invited speaker, July 2006

ZiF-Zentrum für interdisziplinäre Forschung, invited speaker, Bielefeld, Germany, April 2006

Pedagogical Catalysts for Adaptable Leaders Workshop, invited speaker, Marina del Rey, CA, December 2005

University of Santa Barbara Research Center for Virtual Environments and Behavior, invited speaker, November 2005.

University of Michigan Automotive Research Center, invited speaker, Oct 2005

HUMAINE Network of Excellence on Emotion and Human-Machine Interaction, Invited panel speaker, Newcastle, Northern Ireland, June 2005, June 2006

DARPA Workshop on Technologically Enhanced Training Agents, Marina del Rey, April, 2005

Workshop on Integrated Models of Cognitive Systems, invited speaker, Saratoga Springs, NY, March 2005

Imagina: European Digital Content Creation Trade Show, invited panelist, Monte Carlo, February, 2005

Pell Center for International Relations and Public Policy, December 2004 Conference on Behavioral Representation in Modeling and Simulation, invited panelist, Arlington, VA, 2004

University of Chicago, Psychology Department, 2004 Dagstuhl-Seminar on Evaluating Embodied Conversational Agents, 2004

AAAI Spring Symposium on Affective Architectures, 2004, Invited panel organizer

University of Hertfordshire, Adaptive Systems Research Group, 2003

Soar Workshop, Michigan, 2003

University of Michigan, Psychology Department, 2003

Austrian Research Institute for Artificial Intelligence, 2003

Vienna Workshop on Educational Agents - More than Virtual Tutors, 2003

Symposium on The Dis/simulations of War and Peace, Brown University, 2003

IJCAI Cognitive Modeling Workshop, Acapulco, Mexico, 2003, Invited panel participant

Cognitive Architecture Workshop, Stanford, CA, 2003

Harvard University Artificial Intelligence Group (2002)
Keynote Speaker, PRICAI Workshop on Lifelike Animated Agents, Tokyo, Japan, 2002
Computational Social Sciences Conference, Lake Arrowhead, CA, 2002
Intelligent User Interfaces Conference, 2002, Invited panel participant
Keynote Speaker, Computer Animation Conference, Seoul, Korea, 2001
Conference on the New Biopolitics (Rational Choice is Nearly Dead), UCLA, 2000
Institute for Research in Cognitive Science, University of Pennsylvania, 2000
Workshop on Multiagent Spatial Modeling, UCLA, 2000
MIT Media Lab, 2000
Brown Department of Media and Cultural Studies, 2000
Watson Institute for International Studies, Virtual Y2K Conference, 1999
Jet Propulsion Laboratory, California Institute of Technology, 1992,1996
Duke University - Department of Computer Science, 1995
AT&T Bell Labs, 1995
University of California at Irvine - Department of Computer Science, 1995
Haverford College - Department of Computer Science, 1995
AAAI Spring Symposium on Goal Driven Learning, Stanford, CA, 1994
University of Iowa - Department of Management Sciences, 1992
NASA Ames Research Center, 1992

Books

Rafa Calvo, Sidney D'Mello, Jonathan Gratch and Arvid Kappas (Eds). *Handbook of Affective Computing*. Oxford University Press. 2015

Jonathan Gratch and Stacy Marsella (Eds.). *Social Emotions in Nature and Artifact*. Oxford University Press, 2013

Journal Publications

Celso de Melo, Stacy Marsella and Jonathan Gratch. Social decisions and fairness change when people's interests are represented by autonomous agents. *Journal of Autonomous Agents and Multiagent Systems* (in press)

Saba Khashe, Gale Lucas, Burcin Becerik and Jonathan Gratch. Towards Effective Building-Occupant Communication. *Computers in Human Behavior* (in press)

Nicole Krämer, Gale Lucas, Lea Schmitt and Jonathan Gratch. Social Snacking with a virtual agent - On the interrelation of need to belong and effects of social responsiveness when interacting with artificial entities. *International Journal of Human-Computer Studies* (in press).

Gale Lucas, Jonathan Gratch, Nikolaos Malandrakis, Evan Szablowski, Eli Fessler and Jeffrey Nichols. GOAALLL!: Using Sentiment in the World Cup to Explore Theories of Emotion. *Image and Vision Computing* (in press)

Nicole C. Krämer, Bilge Karacora, Gale Lucas, Morteza Dehghani, Gina Rütter, and Jonathan Gratch. Closing the gender gap in STEM with friendly male instructors? On the effects of rapport behavior and gender of a virtual agent in an instructional interaction. *Computers & Education*. Vol 99. 2016. pp1-13

Celso de Melo, Stacy Marsella and Jonathan Gratch. People Don't Feel Guilty About Exploiting Machines. *ACM Transactions on Computer-Human Interaction* 23(2), 2016

Scherer, Stefan, Gale Lucas, Jonathan Gratch, Albert Rizzo, and Louis-Philippe Morency. Self-reported symptoms of depression and PTSD are associated with reduced vowel space in screening interviews. *IEEE Transactions on Affective Computing* 7(1). 2016. pp 59-73

Gale Lucas, Jonathan Gratch, Lin Cheng and Stacy Marsella. When the going gets tough: Grit Predicts costly perseverance. *Journal of Research in Personality* vol. 59. 2015. pp 15-22

Yuqiong Wang, Gale Lucas, Peter Khooshabeh, Celso De Melo and Jonathan Gratch. 'Effects of Emotional Expressions on Persuasion. *Social Influence* 10(4). 2015 pp. 236-249

Sunghyun Park, Stefan Scherer, Jonathan Gratch, Peter Carnevale, and Louis-Philippe Morency. I Can Already Guess Your Answer: Predicting Respondent Reactions during Dyadic Negotiation. *IEEE Transactions on Affective Computing* 6(2). 2015. pp 86-96

Celso de Melo, Jonathan Gratch, and Peter Carnevale. Humans vs. Computers: Impact of Emotion Expressions on People's Decision Making. *IEEE Transactions on Affective Computing*. 6(2). 2015. pp 127-136

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