

Jonathan Gratch

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

Artificial Intelligence, affective science, cognitive science, affective-computing, 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:

CS Diversity, Equity and Inclusion Committee (2020-)
Provost University Research Committee (2017-2019)
Graduate Student Assistantship Committee (2000-2003; 2011-2014)
Research Faculty Merit Committee (Chair, 2007; 2015-2017)
Committee for Research Faculty Applications (2007-2008)

Courses:

CS534: Affective Computing (developed), Fall 2006, Spring 2009, Fall 2011, Spring 2014, Fall 2015, Fall 2017, Spring 2018, Spring 2020
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, PhD 2020
Thesis: A Framework for Research in Human-Agent Negotiation

Emmanuel Johnson, PhD 2021
Thesis: Improving Negotiation Training Through Automated Personalized Feedback

Rens Hoegen
Su Lei
Sophie Mallaro (left program for industry)
James Hale

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
Zahra Nazari (USC), Chair
Laura Garcia (USC), Member
Aaron Schlenker (USC), Member
Sara McCarthy (USC), Member
Behnaz Farahi (USC), Member
YuYu Xu (Northeastern), Member
Johnathan Mell (USC), Chair
Laura Garcia (USC), Member
Emmanuel Johnson (USC), Chair
Karen Tatarian (Sorbonne), Member
Yuwen Wang (USC), Member

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

Jett Bronstein, Pomona College, 2020
Maria-Angelika-Nikita, Stanford University, 2020
Aike Horstmann, University of Duisburg-Essen, 2020
Yixian Li, Western University, 2019
Minha Lee, Eindhoven University, 2018
Sarah Roediger, University of Twente, 2018
Lisanne Pauw, University of Amsterdam, 2017
Guillaume Prevost, French Military Academy 2017
Adrien Biciacci, French Military Academy 2017

Shannon Monahan, American University of Paris, 2017
James Finch, Michigan State University, 2017
Helen Wauck, University of Illinois at Urbana-Champaign, 2017
Jaina Lehr, University of Duisburg-Essen, 2017
Xijing Wang, University College London, 2017
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
Veronica Chu, University of California, Irvine, 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

Autonomy-mediated Trust, AFOSR (2023-2025), \$747,600, PI
Modeling Values in Conflict Negotiations, US Gov (2022), \$100,000, PI
Context-based emotion-understanding for human-machine teaming, ARO (2022-2024), \$1,200,000, PI
Research Gift. Honda Research Institute (2020), \$15,000, PI
Psychophysiological, Robotic and Analytical Equipment for Research on the Underlying Mechanisms of Human-Machine Team Interactions, AFOSR (2019), \$130,000, PI
Adolescent responses to varying environments in virtual reality simulations, NIH R21 (2019-2023), \$440,000, Co-PI
Organizational Implications of Autonomy-Mediated Interaction, OSD (2018-2023), \$2,500,000, PI
Examining oxytocin as a causal mechanism for long-term bonding between humans and autonomy, OSD (2018-2021), \$320,000 (USC-portion), Co-PI
Advancing the Use of Automated Dialogue Systems for Teaching Communication and Interpersonal Skills, NSF (2018-2021), \$744,863, PI
Affective Computing Research, Fujitsu (2018-2019), \$207,926, PI
Strategic Emotions for Leader Development, ARL (2018-2019), \$549,000, PI
Virtual Human Assessment, ARL (2018-2019), \$440,952, PI
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:

Guest Editor, IEEE Transactions on Affective Computing issue on ethics (2022)
Editor-in-Chief (founding), IEEE Transactions on Affective Computing (2010-2014) –
Impact factor on departure: 3.467 (current 14)
Associate Editor, Affective Science (2019-)
Associate Editor, Emotion Review (2007-)
Associate Editor, Journal of Autonomous Agents and Multiagent Systems (2010-)
Guest Editor, IEEE Signal Processing Magazine, special issue on Intelligent Signal Processing for Affective Computing (2019-2020)
Guest Editor, Frontiers in Psychology, Special Topic on Modeling Virtual Humans for Understanding the Mind (2019-2020)
Guest Editor, ACM TiiS, special issue on Trust in Autonomy (2017)
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)

Board Membership:

Editor Search Committee, APA Technology, Mind and Behavior (2018-2019)

Steering Committee Member, APA Technology, Mind and Society (2018)

Publication Committee Member, Society for Affective Science (2018-)

Program Chair or Co-Chair:

International Society for Research on Emotion, General Chair, 2022

AAMAS, Area Chair, 2022, 2023

International Joint Conference on Artificial Intelligence, Area Chair, 2016-2018, 2021

AAAI Conference on Artificial Intelligence, Area Chair, 2020

Affective Computing and Intelligent Interaction, General Co-Chair, 2019

Affective Computing Pre-Conference at International Society for Research on Emotions, Co-Chair 2019

Affective Computing Pre-Conference at Society for Affective Science, Co-Chair 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:

APA Technology, Mind and Society (2021)

International Conference on Autonomous Agents and Multiagent Systems (2010,2013-2021)

International Conference on Intelligent Virtual Agents (2014, 2015, 2019)

International Joint Conference on Artificial Intelligence (2018)

AAAI Conference on Artificial Intelligence (2015, 2016, 2017)

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 Society for Research on Emotions (2019)
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:

Philosophical Transactions (2022)
International Journal on HCI (2022)
Negotiation Journal (2022)
IEEE Magazine (2021)
Group Decision Making and Negotiation (2021)
Trends in Cognitive Science (2020)
Swiss National Science Foundation (2020)
Proceedings of the National Academy of Science (2019)
Emotion (2019)
IMWUT (2018-2019)
Emotion Review (2015-2016,2018)
Journal of Experimental Child Psychology (2018)
International Journal of Human-Computer Studies (2018)
Israel Science Foundation (2017)
Communications of the ACM (2017)
IEEE Computer (2017)
Computer Speech and Language (2017)
NIH Study Section (2016-2017)
Journal of AI Research (2017)
CHI (2017)
CHI Play (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:

Publication Committee Member, Society for Affective Science (2019-)
Scientific Advisory Board for Automated Negotiation Agents Competition (2018-)
Advisory Board Member, Psychology of Technology Institute (2017-)
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

Top Downloaded Article, The Negotiation Journal 2023
Integrative Affective Science Award, Society for Affective Science 2022
Most influential paper award, International Foundation for Autonomous Agents and Multiagent Systems 2022
Best Student Paper, International Conference on Advances in Cognitive Systems 2021
Fellow for the Association for the Advancement of Affective Computing, 2021
Finalist, Best Dissertation Award (for Johnathan Mell), 9th International Conference on Affective Computing and Intelligent Interaction, October 2021
Best Paper, 21st ACM International Conference on Multimodal Interaction, October 2019
Best Paper Finalist, *International Conference on Autonomous Agents and Multi-Agent Systems*. 2018
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
Fellow of the Association for the Advancement of Artificial Intelligence, 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, 5th Workshop on Modeling Socio-Emotional and Cognitive Processes from Multimodal Data In the Wild. Paris, France, October 2023
Invited Speaker, Behavioral Studies Colloquium. ETH Zurich. September 2023
Keynote Speaker, ANIMATAS Symposium on Human-Machine Interaction, June 2022
Invited Speaker, British Royal Society meeting on the Science of Face-to-face Interaction, April 2022
Invited Speaker, University of Florida AI Seminar Series, November 2021
Keynote Speaker, ANIMATAS Symposium on Human-Machine Interaction, October 2021
Distinguished Lecture Speaker, UCSB Department of Communication, October 2021
Invited Panel Chair, 9th International Conference on Affective Computing and Intelligent Interaction, September 2021
Invited Speaker, SurveyMonkey ML External Speaker Series, June 2021
Keynote Speaker, Conference on the Fantastic in Media Entertainment, May 2021
Invited Seminar, Max-Planck Center for Humans and Machines, November 2020
Distinguished Speaker, ISRE Webinar Series, October 2020
Invited Panelist, Harvard Program on Negotiation, Boston, May 2020

Keynote Speaker, 7th International Conference on Human-Agent Interaction, Kyoto Japan, October 2019

Invited Panelist, American Employment Law Council Conference, Ojai, CA, October 2019

Keynote Speaker, Workshop on Methodology and/of Evaluation of IVAs, Paris, France, July 2019

Research Colloquium, Northwestern University, March 2019

Research Colloquium, UC Merced, February 2019

Keynote Speaker, Society for Cognitive Studies of the Moving Image, June 2018

Invited Panelist, American Psychological Society, May 2018

Research Colloquium, Oxford University, February 2018

Research Colloquium, TU Delft, February 2018

Invited Panelist, NSF Cognitive Assistants Workshop, November 2017

Keynote Speaker, International Society for Research on Emotion, St. Louis, July 2017

Invited Panelist, SIGGRAPH Panel on Emotion and Affect in VR, July 2017

Invited 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 (I/ITSEC), 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, Reykjavík 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, 2014

Journal Publications

Arvid Kappas and Jonathan Gratch. These aren't the droids you are looking for: promises and challenges for the Intersection of Affective Science and Robotics/AI. *Affective Science* (in press)

Celso de Melo, Jonathan Gratch, Stacy Marsella and Catherine Pelachaud, Social Functions of Machine Emotional Expressions," *Proceedings of the IEEE* (in press)

Alaine Murawski, Vanessa Ramirez-Zohfeld, Allison Schierer, Johnathan Mell, Jonathan Gratch, Jeanne Brett, Lee A Lindquist (in press). Transforming a Negotiation Framework to Resolve Conflicts between Older Adults and Caregivers. *Geriatrics* (in press)

Jonathan Gratch. The promise and peril of interactive embodied agents for studying non-verbal communication: a machine learning perspective. *Philosophical Transactions of the Royal Society B*. 378(1875). 2023

Kushal Chawla, Rene Clever, Jaysa Ramirez, Gale Lucas and Jonathan Gratch. Towards Emotion-Aware Agents for Improved User Satisfaction and Partner Perception in Negotiation Dialogues. *IEEE Transactions on Affective Computing* (in press)

Su Lei and Jonathan Gratch. Emotional expressivity is a reliable signal of surprise. *IEEE Transactions on Affective Computing* (in press)

Jessie Hoegen, David DeVault, Jonathan Gratch. Exploring the Function of Expressions in Negotiation: the DyNego-WOZ Corpus. *IEEE Transactions on Affective Computing* (in press)

Lisanne Pauw, Disa Sauter, Gerben van Kleef, Gale Lucas, Jonathan Gratch, Agneta Fischer. The avatar will see you now: Support from a virtual human provides socio-emotional benefits. *Computers in Human Behavior*. 2022.

Jonathan Gratch and Nathanael Fast. The power to harm: AI assistants pave the way to unethical behavior, *Current Opinions in Psychology*. 2022

Ken Fujiwara, Rens Hoegen, Jonathan Gratch, and Norah Dunbar. Synchrony Facilitates Altruistic Decision Making for Non-Human Avatars. *Computers in Human Behavior* 128, 2022

Ewart J de Visser, Yigit Topoglu, Shawn Joshi, Frank Krueger, Elizabeth Phillips, Jonathan Gratch, Chad C. Tossell, Hasan Ayaz. Designing Man's New Best Friend: Enhancing Human-Robot Dog Interaction through Dog-Like Framing and Appearance. *Sensors*. 2022

Daniel Dukes, Kathryn Abrams, Ralph Adolphs, et al. The Rise of Affectivism. *Nature Human Behavior* 5, 2021, p 816-820

Aike Horstmann, Jonathan Gratch and Nicole C. Kramer. I just wanna blame somebody, not something! Reactions to a computer agent giving negative feedback based on the instructions of a person. *International Journal of Human-Computer Studies* 154. 2021

Johnathan Mell, Markus Beissinger and Jonathan Gratch. An expert-model and machine learning hybrid approach to predicting human-agent negotiation outcomes in varied data. *Journal on Multimodal User Interfaces* 15, 2021. Pp. 215-227

Celso de Melo, Jonathan Gratch and Frank Krueger. Heuristic thinking and altruism towards machines in people impacted by Covid-19. *iScience* 24 (3). 2021

Celso de Melo, Stacy Marsella and Jonathan Gratch. Risk of Injury in Moral Dilemmas With Autonomous Vehicles. *Frontiers in Robotics and AI* vol 7, 2021

Jonathan Gratch. The Promise and Peril of Automated Negotiators. *Negotiation Journal* 37 (1). 2021, pp. 13-34

Jonathan Gratch. The field of Affective Computing: An interdisciplinary perspective. *Transactions of the Japanese Society for Artificial Intelligence* 36(1), 2021, p. 4-12 (in Japanese)

Minha Lee, Gale Lucas and Jonathan Gratch. Comparing mind perception in strategic exchanges: Human-agent negotiation, dictator and ultimatum games. *Journal on Multimodal User Interfaces* 15 (2), 2021, pp. 201-214

Johnathan Mell, Gale Lucas, Sharon Mozgai, Jonathan Gratch. The Effects of Experience on Deception in Human-Agent Negotiation. *Journal of Artificial Intelligence Research* 68, 2020, pp. 633-660

Celso M. de Melo, Stacy Marsella, and Jonathan Gratch. Human Cooperation when Acting Through Autonomous Machines. *Proceedings of the National Academy of Science (PNAS)* 116 (9), 2019, pp. 3482-3487

Veronica Chu, Gale Lucas, Su Lei, Sharon Mozgai, Peter Khooshabeh, and Jonathan Gratch. Emotion Regulation in the Prisoner's Dilemma: Effects of Reappraisal on Behavioral Measures and Cardiovascular Measures of Challenge and Threat. *Frontiers in Human Neuroscience*, 14, 2019

Magdalena Rychlowska, Job van der Schalk, Jonathan Gratch, Eva Breitinger, and Antony Manstead. Beyond actions: Reparatory effects of regret in intergroup trust games. *Journal of Experimental Social Psychology* 82, 2019, pp. 74-84

Saba Khashe, Gale Lucas, Burcin Becerik-Gerber and Jonathan Gratch. Establishing social dialog between buildings and their users for enabling human-building interactions. *International Journal of Human-Computer Interaction* 35 (17), 2019, pp. 1545-1556

Knott, B. A., Gratch, J., Cangelosi, A., & Caverlee, J. ACM Transactions on Interactive Intelligent Systems (TiiS) Special Issue on Trust and Influence in Intelligent Human-Machine Interaction. *ACM Transactions on Interactive Intelligent Systems* 8(4), 1-3 2018

Xijing Wang, Eva G. Krumhuber and Jonathan Gratch. The Interpersonal Effects of Emotions in Money versus Candy Games. *Journal of Experimental Social Psychology* 79, 2018, pp. 315-327

Sidney D'Mello, Arvid Kappas and Jonathan Gratch. The Affective Computing Approach to Affect Measurement. *Emotion Review* 10(2). 2018, pp. 174-183

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* 32(1), 2018. pp. 163-187

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* v109. 2018. pp. 112-121

Gale Lucas, Albert Rizzo, Jonathan Gratch, Stefan Scherer, Giota Stratou, Jill Boberg, Louis-Philippe Morency. Reporting Mental Health Symptoms: Breaking Down Barriers to Care with Virtual Human Interviewers. *Frontiers in Robotics and AI* 4(51). 2017.

Saba Khashe, Gale Lucas, Burcin Becerik and Jonathan Gratch. Buildings with persona: Towards effective building-occupant communication. *Computers in Human Behavior, Vol 75*. 2017. pp. 607-618

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*. Vol 66. 2017. pp 58-65

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

Ahyoung Choi, Celso de Melo, Peter Khooshabeh, Woontack Woo and Jonathan Gratch. Physiological Evidence for a Dual Process Model of the Social Effects of Emotion in Computers. *International Journal of Human-Computer Studies* Vol. 74. 2015. pp. 41-53

Morteza Dehghani, Peter Khooshabeh, Angela Nazerian and Jonathan Gratch. The Subtlety of Sound: Accent as a Marker for Culture. *Journal of Language and Social Psychology* 34(3). 2015. pp 21-250

Stefan Scherer, Giota Stratou, Gale Lucas, Marwa Mahmoud, Jill Boberg, Jonathan Gratch, Albert Rizzo, and Louis-Philippe Morency. Automatic Audiovisual Behavior Descriptors for Psychological Disorder Analysis. *Image and Vision Computing Journal, Special Issue on Best of Face and Gesture 2013*. 32(10). 2014. pp. 648-658

Giota Stratou, Stefan Scherer, Jonathan Gratch and Louis-Philippe Morency. Automatic Nonverbal Behavior Indicators of Depression and PTSD: The Effect of Gender. *Journal on Multimodal User Interfaces, Special Issue: Best of ACII*, 9(1). 2015. Pp 17-29.

Gale Lucas, Jonathan Gratch, Aisha King and Louis-Philippe Morency. It's Only a Computer: Virtual Humans Increase Willingness to Disclose. *Computers in Human Behavior*. v37. 2014. pp. 94-100

Stacy Marsella and Jonathan Gratch. Computationally modeling human behavior. *Communications of the ACM* 57(12) 2014. pp 55-67

Morteza Dehghani, Peter Carnevale and Jonathan Gratch. Interpersonal effects of expressed anger and sorrow in morally charged negotiation. *Judgment and Decision Making*. 9(2). 2014

Sinhwa Kang and Jonathan Gratch. Exploring Users' Social Responses to Computer Counseling Interviewers' Behavior. *Journal of Computers in Human Behavior*, Vol 34. 2014, pp. 120-130

Celso de Melo, Peter Carnevale, Stephen Read and Jonathan Gratch. Reading people's minds from emotion expressions in interdependent decision making. *Journal of Personality and Social Psychology*, 106(1), 2014, pp. 73-88

Peter Khooshabeh, Morteza Dehghani, Angela Nazarian, Jonathan Gratch. The Cultural Influence Model: When Accented Natural Language Spoken by Virtual Characters Matters. *Journal of Artificial Intelligence and Society*, 32(1), 2014, pp 9-16

Morteza Dehghani, Kenj Sagae, Sonia Sachdeva, Jonathan Gratch. Analyzing Political Rhetoric in Conservative and Liberal Weblogs Related to the Construction of the "Ground Zero Mosque". *Journal of Information Technology & Politics*. Vol. 11 (1), 2014 pp. 1-14.

Rainer Reisenzein, Eva Hudlicka, Mehdi Dastani, Jonathan Gratch, Koen Hindriks, Emiliano Lorini, and John-Jules Meyer. Computational Modeling of Emotion: Towards Improving the Inter- and Intradisciplinary Exchange. *IEEE Transactions on Affective Computing*, 4(3), 2013, pp. 246-266

Jana Appel, Astrid Marieke von der Pütten, Nicole C. Krämer and Jonathan Gratch. Does humanity matter? Analyzing the importance of social cues and perceived agency of a computer system for the emergence of social reactions during human-computer interaction. *Advances in Human-Computer Interaction*. 13, 2012

Choi, A., de Melo, C., Woo, W., & Gratch, J. Affective engagement to emotional facial expressions of embodied social agents in a decision-making game. *Computer Animation and Virtual Worlds*, 23, 3-4, 2012, pp. 331-342

Wenji Mao and Jonathan Gratch. Modeling Social Causality and Responsibility Judgment in Multi-Agent Interactions. *Journal of Artificial Intelligence Research*. Vol 44. 2012. pp 223-273.

Celso M. de Melo, Peter Carnevale and Jonathan Gratch. The Impact of Emotion Displays in Embodied Agents on Emergence of Cooperation with People. *PRESENCE: Teleoperators and Virtual Environments* 20(5). 2012. pp-449-465

Jonathan Gratch. The Sciences of the Artificial Emotions: Commentary on Aylett & Paiva. *Emotion Review*, 4(3). 2012. pp. 266-268

Wenji Mao, Jonathan Gratch, Xiaochen Li. Probabilistic Plan Inference for Group Behavior Prediction. *IEEE Intelligent Systems*. 2012. pp27-36

Peter Khooshabeh, Jonathan Gratch. Affective learner-centered design framework for virtual human educational technologies. Human Computer Interaction and Learning Technologies. Abu Dhabi, UAE: Published by *International Journal of Information Technology & Computer Science (IJITCS)*. 2012

Sin-Hwa Kang and Jonathan Gratch. People Like Virtual Counselors That Highly-Disclose About Themselves. *Annual Review of Cybertherapy and Telemedicine*, vol 167. 2011. pp. 143-148

Astrid M. von der Pütten, Nicole C. Krämer, Jonathan Gratch and Sin-Hwa Kang. It doesn't matter what you are! Explaining social effects of agents and avatars. *Computers in Human Behavior* 26(6). 2010

Celso de Melo, Patrick Kenny and Jonathan Gratch. Influence of Autonomic Signals on Perception of Emotions in Embodied Agents. *Applied Artificial Intelligence* 24(6). 2010. pp. 494-509

Sin-Hwa Kang and Jonathan Gratch. Virtual Humans Elicit Socially Anxious Interactants' Verbal Self-Disclosure. *Journal of Visualization and Computer Animation*, 21(3-4) pp 473-482. 2010.

Celso de Melo, Patrick Kenny, and Jonathan Gratch. Real-Time Expression of Affect through Respiration. *Journal of Visualization and Computer Animation*. 21(3-4). Pp. 225-234. 2010.

Louis-Philippe Morency, Ivan de Kok and Jonathan Gratch. A Probabilistic Multimodal Approach for Predicting Listener Backchannels. *Journal of Autonomous Agents and Multi-Agent Systems*, Springer, 20(1), 2009, 70-84

Jonathan Gratch, Stacy Marsella and Paolo Petta, "Modeling the Antecedents and Consequences of Emotion," *Journal of Cognitive Systems Research*, 10(1), 2009, pp. 1-5.

Stacy Marsella and Jonathan Gratch, "EMA: A process model of appraisal dynamics," *Journal of Cognitive Systems Research*, 10(1), 2009, pp. 70-90.

Wenji Mao and Jonathan Gratch. "Modeling Social Inference in Virtual Agents. *Journal of Artificial Intelligence and Society*, 24(1), 2009, pp. 5-11.

Core, M. G., Traum, D., Lane, H. C., Swartout, W., Marsella, S., Gratch, J., and van Lent, M., "Teaching negotiation skills through practice and reflection with virtual humans," *Simulation*, 82, 2006, pp. 685-701

William Swartout, Jonathan Gratch, Randall Hill, Eduard Hovy, Stacy Marsella, Jeff Rickel and David Traum, "Toward Virtual Humans," *AI Magazine*, 27(1) 2006

Jonathan Gratch and Stacy Marsella, "Evaluating a computational model of emotion," in *Journal of Autonomous Agents and Multiagent Systems*, Special Issue on the Best of AAMAS 2004, 11(1), July 2005, pp. 23-43.

Jonathan Gratch and Stacy Marsella, "Some Lessons for Emotion Psychology

for the Design of Educational Agents," *Journal of Applied Artificial Intelligence* (special issue on "Educational Agents - Beyond Virtual Tutors"), vol. 19, 2005, 215-233.

Jonathan Gratch and Stacy Marsella, A Domain-independent Framework for Modeling Emotion, *Journal of Cognitive Systems Research*, Volume 5, Issue 4, 2004, Pages 269-306.

Randall W. Hill, Jr., Jonathan Gratch, Stacy Marsella, Jeff Rickel, William Swartout, and David Traum, "Virtual Humans in the Mission Rehearsal Exercise System," in *Kunstliche Intelligenzi* special issue on Embodied Conversational Agents, AI number 4/03, pp. 5-10, 2003.

Jonathan Gratch and Stacy Marsella, Fight the way you train: the role and limits of emotions in training for combat, *Brown Journal of World Affairs*, vol. X, issue 1, 63-76, 2003.

Jonathan Gratch, Jeff Rickel, Elisabeth Andre, Norman Badler, Justine Cassell, and Eric Petajan, "Creating Interactive Virtual Humans: Some Assembly Required," in *IEEE Intelligent Systems* July/August 2002, pp. 54-63.

Jeff Rickel, Stacy Marsella, Jonathan Gratch, Randall Hill, David Traum and Bill Swartout, "Towards a New Generation of Virtual Humans for Interactive Experiences," in *IEEE Intelligent Systems* July/August 2002, pp. 32-38

Jonathan Gratch and Gerald DeJong, "A Decision-theoretic Approach to Adaptive Problem Solving," *Artificial Intelligence*, (88) 1-2, 1996, pp. 101-142.

Jonathan Gratch and Steve Chien, "Adaptive Problem-solving for Large-scale Scheduling Problems: A Case Study," *Journal of Artificial Intelligence Research* 4, 1996, pp. 365-396.

Steve Chien, Jonathan Gratch, and Michael Burl, "On the Efficient Allocation of Resources for Hypothesis Evaluation: A Statistical Approach," *IEEE Transaction on Pattern Analysis and Machine Learning* (PAMI), 17(4), 1995, pp. 652-665.

Fully Refereed Conference Publications

Ala Tak and Jonathan Gratch. Is GPT a Computational Model of Emotion. International Conference on Affective Computing and Intelligent Interaction, Boston, MA, September 2023

Daniel Yang, Aditya Kommineni, Mohammad Alshehri, Nilamadhab Mohanty, Vedant Modi, Jonathan Gratch and Shrikanth Narayanan. Context Unlocks Emotions: Text-based Emotion Classification Dataset Auditing with Large Language Models. International Conference on Affective Computing and Intelligent Interaction. Boston, MA, September 2023

Su Lei and Jonathan Gratch. Sources of Facial Expression Synchrony. International Conference on Affective Computing and Intelligent Interaction. Boston, MA, September 2023

Jessie Hoegen, Gale Lucas, Danielle Shore, Brian Parkinson and Jonathan Gratch. How Expression and Context Determine Second-person Judgments of Emotion. International Conference on Affective Computing and Intelligent Interaction. Boston, MA, September 2023

James Hale, Peter Kim and Jonathan Gratch. Risk Aversion and Demographic Factors Affect Preference Elicitation and Outcomes of a Salary Negotiation. *45th Annual Conference of the Cognitive Science Society*. Sydney, Australia, August 2023

Chawla, Kushal, Weiyan Shi, Jengwen Zhang, Gale Lucas, Zhou Yu, and Jonathan Gratch. Social Influence Dialogue Systems: A Survey of Datasets and Models for Social Influence Tasks. *17th Conference of the European Chapter of the Association for Computational Linguistics (ACL)*. May 2023

James Hale and Jonathan Gratch. Preference Interdependencies in a Multi-Issue Salary Negotiation. *22nd ACM International Conference on Intelligent Virtual Agents*. Faro, Portugal. 2022

James Hale, Harsh Jalan, Nidhi Saini, Shao Ling Tan, Junhyuck Woo, and Jonathan Gratch. Negotiation Game to Introduce Non-linear Utility. *22nd ACM International Conference on Intelligent Virtual Agents*. Faro, Portugal. 2022

Eu Gene Lee, Zachary McNulty, Alex Gentle, Prerak Tusharkumar Pradhan, and Jonathan Gratch. Examining the Impact of Emotion and Agency on Negotiator Behavior. *22nd ACM International Conference on Intelligent Virtual Agents*. Faro, Portugal. 2022

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Maria Angelika-Nikita, Celso de Melo, Kazunori Terada, Gale Lucas and Jonathan Gratch. The Impact of Partner Expressions on Felt Emotion in the Iterated Prisoner's Dilemma: An Event-level Analysis. *Ninth Annual Conference on Advances in Cognitive Systems (ACS) 2021 Best Student Paper*

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Kazunori Terada, Mitsuki Okazoe and Jonathan Gratch. Effect of politeness strategies in dialogue on negotiation outcomes. *21st ACM International Conference on Intelligent Virtual Agents*. Kyoto, Japan 2021

Emmanuel Johnson, Jonathan Gratch, Jill Boberg, David DeVault, Peter Kim and Gale Lucas. Using Intelligent Agents to Examine Gender in Negotiations. *21st ACM International Conference on Intelligent Virtual Agents*. Kyoto, Japan 2021

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Kushal Chawla, Rene Clever, Jaysa Ramirez, Gale Lucas and Jonathan Gratch. Towards Emotion-Aware Agents for Negotiation Dialogues. *9th International Conference on Affective Computing and Intelligent Interaction*, Nara, Japan 2021

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Reyhan Aydoğan, Tim Baarslag, Katsuhide Fujita, Johnathan Mell, Jonathan Gratch, Dave De Jonge, Yasser Mohammad, Shinji Nakadai, Satoshi Morinaga, Hirotaka Osawa, Claus Aranha and Catholijn Jonker. Research Challenges for the Automated Negotiating Agents Competition (ANAC) 2019. *7th International Conference on Agreement Technologies*. Greece 2020

Johnathan Mell, Gale Lucas and Jonathan Gratch. Varied Magnitude Favor Exchange in Human-Agent Negotiation. *20th ACM International Conference on Intelligent Virtual Agents*. Glasgow, Scotland 2020

Emmanuel Johnson and Jonathan Gratch. The Impact of Implicit Information Exchange in Human-agent Negotiation. *20th ACM International Conference on Intelligent Virtual Agents*. Glasgow, Scotland 2020

Su Lei, Kalin Stefanov and Jonathan Gratch. Emotion or expressivity? An automated analysis of nonverbal perception in a social dilemma. *15th IEEE International Conference on Automatic Face and Gesture Recognition*. Buenos Aires, Argentina. 2020

Kenta Yasui, Kazunori Terada, Seiji Yamada and Jonathan Gratch. Influence of Lie Frequency and Competition in Zero-sum games. *Proceedings of the Symposium on Human-agent Interaction*. Tokyo, 2020.

Yuushi Toyoda, Gale Lucas, Jonathan Gratch. The effects of autonomy and task meaning in algorithmic management of crowdwork. *Proceedings of the 19th International*

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Yuyu Xu, David Jeong, Pedro Sequeira, Jonathan Gratch, Javed Aslam, Stacy Marsella. A Supervised Topic Model Approach to Learning Effective Styles within Human-Agent Negotiation. *Proceedings of the 19th International Conference on Autonomous Agents and Multi-Agent Systems*. Auckland, New Zealand, May 2020.

Mohammad Soleymani, Kalin Stefanov, Sin-Hwa Kang, Jan Ondras, and Jonathan Gratch. Multimodal Analysis and Estimation of Intimate Self-Disclosure. *21st ACM International Conference on Multimodal Interaction*, Suzhou, China, October 2019. **Best Paper**

Su Lei and Jonathan Gratch. Smile Signals Surprise in a Social Dilemma. *8th International Conference on Affective Computing & Intelligent Interaction*. Cambridge, UK 2019

Rens Hoegen, Jonathan Gratch, Brian Parkinson and Danielle Shore. Signals of Emotion Regulation in a Social Dilemma: Detection from Face and Context. *8th International Conference on Affective Computing & Intelligent Interaction*. Cambridge, UK 2019

Johnathan Mell, Jonathan Gratch, Reyhan Aydoğan, Tim Baarslag and Catholijn M. Jonker. The Likeability-Success Tradeoff: Results of the 2nd Annual Human-Agent Automated Negotiating Agents Competition. *8th International Conference on Affective Computing & Intelligent Interaction*. Cambridge, UK 2019

Kerstin S. Haring, Jessica Tobias, Justin Waligora, Elizabeth Phillips, Nathan L. Tenhundfeld, Gale Lucas, Ewart J. de Visser, Jonathan Gratch and Chad Tossell. Conflict Mediation in Human-Machine Teaming: Using a Virtual Agent to Support Mission Planning and Debriefing. *International Symposium on Robot and Human Interactive Communication (RO-MAN)*. New Delhi, India 2019

Emmanuel Johnson, Sarah Roediger, Gale Lucas and Jonathan Gratch. Assessing Common Errors Students Make When Negotiating. *19th International Conference on Intelligent Virtual Agents*. Paris, France 2019

Gale Lucas, Janina Lehr, Nicole Kraemer and Jonathan Gratch. The effectiveness of social influence tactics when used by a virtual agent. *19th International Conference on Intelligent Virtual Agents*. Paris, France 2019

Minha Lee, Gale Lucas, Johnathan Mell, Emmanuel Johnson and Jonathan Gratch. What's on Your Virtual Mind? Mind Perception in Human-Agent Negotiations. *19th International Conference on Intelligent Virtual Agents*. Paris, France 2019

Artstein, R., Boberg, J., Gainer, A., Gratch, J., Johnson, E., Leuski, A., et al. The Niki and Julie Corpus: collaborative multimodal dialogues between humans, robots, and virtual agents. *11th Language Resources Evaluation Conference*. Miyazaki, Japan 2018.

Emmanuel Johnson, Gale Lucas, Peter Kim and Jonathan Gratch. Intelligent tutoring system for negotiation skills training. *20th International Conference on Artificial Intelligence in Education*. London, UK 2018

Rens Hoegen, Job van der Schalk, Gale Lucas and Jonathan Gratch. The impact of agent facial mimicry on social behavior in a prisoner's dilemma. *18th International Conference on Intelligent Virtual Agents*. Sydney, Australia 2018

Gale Lucas, David Traum, Ron Artstein, Jonathan Gratch, Jill Boberg, Alesia Gainer, Emmanuel Johnson, Anton Leuski and Mikio Nakano. Culture, errors, and rapport-building dialogue in social agents. *18th International Conference on Intelligent Virtual Agents*. Sydney, Australia 2018

Gale Lucas, Nicole Krämer, Clara Peters, Lisa-Sophie Taesch, Johnathan Mell and Jon Gratch. Effects of perceived agency and message tone in responding to a virtual personal trainer. *18th International Conference on Intelligent Virtual Agents*. Sydney, Australia 2018

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