

ELENA CORINA GRIGORE

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Research Interests

Robotics, machine learning, artificial intelligence, human-robot interaction, human-robot teaming, adaptive systems, policy search, reinforcement learning, user modeling.

Education

- **Doctor of Philosophy, Computer Science, Yale University, USA** 2018 (expected)
Advisor: Brian Scassellati
Area of study: Policy Search for Adaptive Robots in Human-Robot Teaming
- **Master of Philosophy, Computer Science, Yale University, USA** 2015
- **Master of Science, Computer Science, Yale University, USA** 2015
- **Master of Engineering with Study Abroad**
Computer Science, University of Bristol, UK 2012
Advisors: Kerstin Eder (University of Bristol, UK)
Anthony G. Pipe (Bristol Robotics Laboratory, UK)
Christopher Melhuish (Bristol Robotics Laboratory, UK)
Thesis: *I Robot, I Think*
4-year program encompassing my Bachelor's degree
Study Abroad at University of California, San Diego (2010-11)
Master of Engineering with First Class Honors

Publications

- [9] **E. C. Grigore** and B. Scassellati, “Constructing Policies for Supportive Behaviors and Communicative Actions in Human-Robot Teaming”, Under review, 2016.
- [8] **E. C. Grigore**, “Modeling motivational states through interpreting physical activity data for adaptive robot companions”, in *Proceedings of the 23rd International Conference on User Modeling, Adaptation and Personalization (UMAP)*, Dublin, Ireland: Springer, 2015, pp. 379–384.
- [7] **E. C. Grigore**, A. Pereira, and B. Scassellati, “Modeling motivational states in adaptive robot companions”, in *2015 AAAI Fall Symposium Series*, 2015.
- [6] **E. C. Grigore** and B. Scassellati, “Maintaining engagement in shared goals with a personal robot companion through motivational state modeling”, in *Proceedings of the Human-Robot Teaming Workshop at the International Conference on Human-Robot Interaction (HRI)*, Portland, OR, 2015.
- [5] B. Hayes, **E. C. Grigore**, A. Litoiu, A. Ramachandran, and B. Scassellati, “A developmentally inspired transfer learning approach for predicting skill durations”, in *2014 Joint IEEE International Conferences on Development and Learning and Epigenetic Robotics (ICDL-Epirob)*, IEEE, 2014, pp. 181–186.
- [4] E. Short, K. Swift-Spong, J. Greczek, A. Ramachandran, A. Litoiu, **E. C. Grigore**, D. Feil-Seifer, S. Shuster, J. J. Lee, S. Huang, *et al.*, “How to train your dragonbot: socially assistive robots for teaching children about nutrition through play”, in *The 23rd IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN)*, IEEE, 2014, pp. 924–929.
- [3] **E. C. Grigore**, K. Eder, A. G. Pipe, C. Melhuish, and U. Leonards, “Joint action understanding improves robot-to-human object handover”, in *Proceedings of the 26th IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, IEEE, 2013, pp. 4622–4629.
- [2] **E. C. Grigore** and B. Scassellati, “Feasibility of sar approaches – helping children with learning tasks”, in *Proceedings of International Workshop on Developmental Social Robotics (DevSor): Reasoning about Human, Perspective, Affordances and Effort for Socially Situated Robots at the 26th IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Tokyo, Japan, 2013, pp. 22–24.
- [1] **E. C. Grigore**, K. Eder, A. Lenz, S. Skachek, A. G. Pipe, and C. Melhuish, “Towards safe human-robot interaction”, in *Towards Autonomous Robotic Systems (TAROS)*, Springer, 2011, pp. 323–335.

Honors and Awards

- **Tocher Fellowship, Yale University, USA** 2015
- **Tocher Fellowship, Yale University, USA** 2014
- **EPSRC (Engineering and Physical Sciences Research Council) Fellowship, UK** 2011
Summer Research Project at the Bristol Robotics Lab, Bristol, UK
- **EPSRC Fellowship, UK** 2010
Summer Research Project at the Bristol Robotics Lab, Bristol, UK
- **Head of Promotion Honorary Prize, Piatra Neamț Computer Science high-school, Romania** 2008

Thesis

[Master's Thesis] **E. C. Grigore**, "I Robot, I Think", Masters thesis *University of Bristol, UK (work performed at the Bristol Robotics Lab, Bristol, UK)*, 2012.

Talks

- Modeling Motivational States in Adaptive Robot Companions. 2015 AAAI Fall Symposium Series. 2015.
- Modeling Behavior through Interpreting Physical Activity Data for Adaptive Human-Robot Interaction Systems. Workshop on Human-Robot Teaming at the International Conference on Human-Robot Interaction. 2015.
- Modeling Motivational States through Interpreting Physical Activity Data for Adaptive Robot Companions. International Conference on User Modeling, Adaptation and Personalization. 2015.
- Feasibility of SAR Approaches. International Workshop on Developmental Social Robotics (DevSor): Reasoning about Human, Perspective, Affordances and Effort for Socially Situated Robots. 2013. (invited talk)
- Joint Action Understanding Improves Robot-to-Human Object Handover. IEEE/RSJ International Conference on Intelligent Robots and Systems. 2013.
- Towards Safe Human-Robot Interaction. Towards Autonomous Robotic Systems. 2011.

Academic Service and Membership

- Conference Refereeing service:
 - ACM/IEEE International Conference on Human-Robot Interaction 2015 – 2016
 - Affective Computing and Intelligent Interaction 2015
 - IEEE/RSJ International Conference on Intelligent Robots and Systems 2014
- Membership in Professional Societies:
 - Association for the Advancement of Artificial Intelligence since 2014
 - IEEE since 2014
 - Cognitive Science Society since 2014
- Outreach: World Science Festival, New York City 2014
- Book Reviewing:
 - *Visual Analysis of Behaviour – From Pixels to Semantics*, by Gong S, Xiang T 2012

Teaching Experience and Mentorship

- Teaching Fellow (at Yale University, USA)
 - Mathematical Tools for Computer Science (CPSC 202A) 2014 – 2015
 - Intelligent Robotics (CPSC 473) 2013 – 2015
 - Intelligent Robotics Lab (CPSC 472) 2013
- Mentored five undergraduate students and a high-school student on research projects 2013 – 2015
- Students Associates Scheme Mathematics student-teacher at Sydney Stringer school, UK 2009

Summer Schools Attended

- Max Planck Institute for Intelligent Systems Machine Learning Summer School (**20% acceptance rate**) 2015
- The First Summer School on Social Human-Robot Interaction 2013