

## Codruta Girlea

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## Education

- 2010 – present      **University of Illinois at Urbana-Champaign**  
Ph.D. Student in Computer Science  
Eyal Amir and Roxana Girju, advisors
- 2006 – 2010      **SNSB, Bucharest, Romania**  
M.S. in Informatics  
Till Mossakowski and Razvan Diaconescu, advisors
- 2004 – 2009      **Polytechnic University of Bucharest, Romania**  
Engineering Diploma in Computer Science  
Cristian Giumale, advisor

## Experience

- 08/10 – present      **University of Illinois at Urbana-Champaign, Illinois, USA**  
Research/Teaching Assistant. My research as a PhD student is on knowledge representation and reasoning, machine learning, and natural language processing for decoding agents' intentions and beliefs in natural language dialogues. I worked on modeling of deceitful and manipulative intent, as well as reasoning about space. I also worked as a TA for the Introduction to Artificial Intelligence class.
- 05/16 – 08/16      **Adobe Research, San Jose, California, USA**  
NLP Research Intern. Worked on building grounded scene graphs from image and caption data.
- 05/15 – 08/15      **Adobe Research, San Jose, California, USA**  
NLP Research Intern. Used WordNet, Stanford CoreNLP, and Adobe proprietary parser to train models for Wh\* question classification.
- 05/14 – 08/14      **6Sense, San Francisco, California, USA**  
Data Science Intern. My responsibilities were building predictive models from large, sparse data.
- 09/09 – 11/09      **DFKI, Bremen, Germany**  
Research Intern. Worked on an extended modal logic institution to support modal logics as part of the CASL specification language.
- 06/08 – 09/08      **Verimag Laboratory, Grenoble, France**  
Research Intern. Established decidability of reachability for counter automata with octagonal constraints.
- 06/06 – 09/06      **SOFTWIN, Bucharest, Romania**  
Summer Intern. My task was integrating components for an educational software system's user interface.

## Research Statement

My work is at the intersection of knowledge representation, natural language processing, and machine learning. More specifically, I am interested in creating computational methods that automatically learn and reason about intentionality, beliefs about beliefs, and belief change in dialogues.

My goal is to use these methods to answer queries about the participants' beliefs and intentions, as well as predict their future decisions, dialogue contributions, and actions. Models that can be used for learning and reasoning in this scenario should be flexible, easy to adapt to new domains, and enable deep, semantic understanding. My work introduces such flexible, knowledge-rich models and computational methods for learning and reasoning with them.

## Papers

NAACL 2016 (short paper)	<b>Psycholinguistic Features for Deceptive Role Detection in Werewolf</b> Codruta Girlea, Roxana Girju, Eyal Amir
KR 2014 (short paper)	<b>Tracking Beliefs and Intentions in the Werewolf Game</b> Codruta Girlea, Eyal Amir, Roxana Girju
STeDy 2012 (best paper award)	<b>Probabilistic Region Connection Calculus</b> Codruta Girlea, Eyal Amir in Spatio-Temporal Dynamics (2012): 62
K Workshop 2010	<b>Abstract Semantics for K Module Composition</b> Codruta Girlea, Grigore Rosu in Electronic Notes in Theoretical Computer Science, 2013
TACAS 2009	<b>Iterating Octagons</b> Marius Bozga, Codruta Girlea, Radu Iosif in Tools and Algorithms for the Construction and Analysis of Systems, Lecture Notes in Computer Science, 2009, Volume 5505/2009, 337-351

## Service and Awards

Fellowship	Saburo Muroga Endowed Fellowship (University of Illinois, 2010)
Best Paper Award	Probabilistic Region Connection Calculus (STeDy 2012)
Reviewer	AAAI 2017, AAAI 2016, HAI 2016, UAI 2016, AAAI 2015, NIPS 2014, KR 2014, UAI 2014, IJCAI 2013, ECAI 2012, UAI 2012, StarAI 2012, AIJ
Teaching Assistant	Introduction to Artificial Intelligence, 2012-2017 Outstanding Teaching Assistant, Spring 2015

## References

- Eyal Amir** Associate Professor  
University of Illinois at Urbana-Champaign  
eyal@illinois.edu
- Roxana Girju** Associate Professor  
University of Illinois at Urbana-Champaign  
girju@illinois.edu
- Walter Chang** Principal Scientist  
Adobe Research  
wachang@adobe.com