

David M. Barbella  
Curriculum Vitae  
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## **Education**

- 2016 PhD (In Progress; Jan 2016 Est. Completion). Northwestern University. Department of Electrical Engineering and Computer Science.
- 2011 M.S. Northwestern University. Department of Electrical Engineering and Computer Science.
- 2008 B.A. Carleton College. Department of Computer Science

## **Publications**

### ***Journal Articles***

- 2015 Barbella, D. and Forbus, K. (2015). Exploiting Connectivity for Case Construction in Learning by Reading. *Advances in Cognitive Systems*. (In Press)
- 2013 Barbella, D. and Forbus, K. (2013). Analogical Word Sense Disambiguation. *Advances in Cognitive Systems*, 2:297-315.
- 2013 Friedman, S., Barbella, D., and Forbus, K. (2012). Revising Domain Knowledge with Cross-Domain Analogy. *Advances in Cognitive Systems*, 2:13-24.

### ***Strongly Refereed Conference Publications***

- 2011 Barbella, D. and Forbus, K. (2011). Analogical Dialogue Acts: Supporting Learning by Reading Analogies in Instructional Texts. *Proceedings of the Twenty-Fifth AAAI Conference on Artificial Intelligence (AAAI 2011)*, San Francisco, CA.

### ***Workshops***

- 2012 Friedman, S., Barbella, D., and Forbus, K. (2012). Repairing Qualitative Domain Knowledge with Cross-Domain Analogy. *Proceedings of QR 2012*.
- 2010 Barbella, D., and Forbus, K. (2010). Analogical dialogue acts: Supporting learning by reading analogies. *Proceedings of NAACL HLT 2010: 1st Int. Workshop on Formalisms and Methodology for Learning by Reading*.

## **Teaching Experience**

2011-2015 Teaching Trainee. EECS 370: Computer Game Design. (Spring 2011, 2013, 2015)

## **Research Experience**

2008-2015 Qualitative Research Group, Northwestern University.

Developed lines of research in natural language understanding, cognitive systems, and analogy, resulting in the articles listed above for this period. Produced, maintained, extended, and instructed others in the use of software designed for experimental and practical machine reading tasks.

## **Professional Skills**

Programming: Lisp, Scheme, Java, Python, Prolog, HTML