Derek M. Reedy

About

I am deeply interested in solving problems in natural language and artificial intelligence, both academic and practical. I like thinking about abstractions and their role in understanding. I want to contribute to bridging the communication gap that exists between the field of A.I. and its popular understanding.

Experience

Software Developer — Jan 2013 to present
IBM — *Littleton, MA*

- Developed automation and evaluation tooling and frameworks for the Watson deep question-answering system.
- Worked closely with the range of technology leveraged across the Watson pipeline, including dependency and constituency parsers, a noisy channel spell checker, semantic structure processors, named entity recognizers, document search engines, natural language similarity and alignment scorers, and a variety of machine learning algorithms.
- Architected, deployed, and maintained infrastructure aspects of cloud-based services for the Watson Developer Cloud platform.
- Guided cross-team testing and architecture efforts in an organization that grew from 30 developers to over 500 in the course of three years.
- Lead an office-wide weekly colloquium series surveying the state of the art in artificial intelligence, machine learning, and distributed systems.
- Served as a training and onboarding resource for non-technical staff and developers transferring from other domains.

Teaching Assistant — Sept 2011 to Aug 2012
Tufts University Computer Science Department — *Medford, MA*

- Designed and taught lectures on code quality, craftsmanship, expressiveness, and abstraction, in software design and development.
- Taught labs and held office hours for intro-level courses on data structures and algorithms, and advanced-level courses on programming languages.

Research Assistant — June 2011 to Aug 2011
Tufts University Human-Robotic Interaction Lab — *Medford, MA*

- Implemented robot control scripts for a project on encouraging ethical behavior in interactions with artificial agents.
- Designed and implemented a system for rule-based agents to perform efficiently-defeasible abduction across a knowledge base, with an emphasis on determining intent in natural language utterances.

Skills

Languages:	C++, **Java**, JavaScript, LISP, Prolog, **Python**, SML
Technologies:	**Cucumber**, Docker, **JUnit**, Lucene/SOLR, Mesos/Marathon, **UIMA**
Miscellany:	Illustrator, Photoshop

Education

B.S. Computer Science and Cognitive and Brain Science — 2008 to 2012
Tufts University — *Medford, MA*

Coursework emphasizing **artificial intelligence**, **linguistics**, **logic**, machine learning, **natural language processing**, neuroscience, philology, **philosophy of language**, **programming languages**, and theory of mind.