

Eric Bigelow

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INTERESTS	Machine learning, computational linguistics, computer vision
SKILLS	<ul style="list-style-type: none">• Strong oral & written communication skills• Working knowledge of and experience with a variety of techniques in NLP, machine learning, data analysis, & data visualization• Adept Python coder, able to efficiently write clean, well-documented code• Familiarity with a variety of python data science tools: numpy, scipy, matplotlib, Jupyter/iPython Notebook, scikit-learn, mpi4py, nltk, gensim, opencv• Experience with git, LaTeX, cluster computing, unix filesystem
command-line tools	
PROGRAMMING LANGUAGES	Strong: Python Competent: R, JavaScript Passable: Java, MATLAB, Bash, Haskell, Lisp, MySql
EDUCATION	University of Rochester , Rochester, NY, USA M.S. in Computer Science Sep 2015 – Present <ul style="list-style-type: none">• Current GPA: 4.0 / 4.0• Completed Coursework: Statistical NLP, Data Mining, Computational Semantics• Spring 2016 Coursework: Machine Learning, Machine Vision, Computational Neuroscience B.A. in Computer Science Sep 2010 – May 2014 B.S. in Brain & Cognitive Sciences <ul style="list-style-type: none">• Overall GPA: 3.6 / 4.0• CS Coursework includes: Logical Foundations of A.I., Human-Computer Interaction, Dialog Systems, Theory of Computation, Data Structures & Algorithm Analysis• BCS Coursework includes: Natural Language Processing, Language & the Brain, Psycholinguistics, Cognitive Neuroscience, Semantic Analysis
RESEARCH EXPERIENCE	University of Rochester , Brain & Cognitive Sciences Department Lab Manager, Computation & Language Lab Aug 2014 – Aug 2015 <ul style="list-style-type: none">• Led project implementing vectorized data analysis to infer posterior distributions over hyper-parameters in a Bayesian model of concept learning• Contributed to open-source Python library for statistical modeling• Designed 600+ participant numerical cognition study, distributed over Amazon Mechanical Turk Research Assistant, Tanenhaus Lab May 2012 – Nov 2012 <ul style="list-style-type: none">• Worked with experimental paradigm studying grounding and miscommunication in dialogue during collaborative problem solving task University of Rochester , Computer Science Department Research Assistant, Rochester Human-Computer Interaction Lab Jun 2014 – Aug 2014 <ul style="list-style-type: none">• Applied supervised and unsupervised algorithms to a large multimodal dataset (the MIT Interview Dataset, pending public release)• Wrote Matlab code to perform time-series analysis, audio & video manipulation, data visualization, and for saving & loading data across functions in a common structured format Research Assistant, Len Schubert's Lab Jan 2013 – May 2014 <ul style="list-style-type: none">• Leading role in novel project to implement a specialist system for reasoning with spatial language as part of a larger natural language understanding framework; designed primary components of architecture• Worked with two other undergraduates in an independently organized group to develop specialist architecture and model database using Python
PUBLICATIONS	CONFERENCE PAPERS <u>E. Bigelow</u> and S. Piantadosi, “Inferring priors in compositional cognitive models,” (<i>to be submitted</i>). <u>E. Bigelow</u> , D. Scarafoni, L. Schubert, and A. Wilson, “On the need for imagistic modeling in story understanding,” in <i>Biologically Inspired Cognitive Architectures 2014</i> (oral presentation), Cambridge, Mass., USA, Nov 2014.

JOURNAL ARTICLES

T. Hu, E. Bigelow, J. Luo, and H. Kautz, "Tales of Two Cities: Using Social Media to Understand Idiosyncratic Lifestyles in Distinctive Metropolitan Areas," *IEEE Transactions on Big Data*, (under review).

E. Bigelow and S. Piantadosi, "A Large Dataset of Generalization Patterns in the Number Game," *Journal of Open Psychology Data*, (under final review).

[Last updated on 2016-01-11]