Mika Braginsky

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Education

June 2014 **B.S. in Computer Science and Engineering & Brain and Cognitive Sciences**, *Massachusetts Institute of Technology*, Cambridge, MA, *GPA: 4.5/5.0*.

Research Experience

Sep 2014 – present **Language and Cognition Lab**, *Stanford University*,
Research Assistant, Advisor: Michael Frank.

Performing large-scale analyses of language development data, such as composition of vocabulary, relations between grammar and the lexicon, and prediction of words' age of acquisition, as well as being the lead developer for:

- Wordbank, an open online repository of children's language development data.
- MetaLab, a tool aggregating meta-analyses of phenomena in the language acquisition literature.
- Wordful, a mobile app that aims to innovate in the collection of word learning data.

Sep 2013 – Aug 2014 **Computational Cognitive Science Group**, *Massachusetts Institute of Technology*,
Undergraduate Researcher, Advisor: Joshua Tenenbaum.

Developed and implemented a model of early cross-situational word learning using a framework of Bayesian inference.

Summer 2013 **Research and Development Team**, *Basis Technology*, R&D Intern.

Worked on error analysis and software development to help improve a statistical model for named-entity resolution and entity linking.

Spring 2013 **Psycholinguistics Laboratory Final Project**, *Massachusetts Insitute of Technology*, Professor: Ted Gibson.

Designed and ran an online experiment examining whether people tend to pick shorter word forms in more predictive global and local contexts.

Fall 2012 **Natural Language & Computer Representation of Knowledge Final Project**, *Massachusetts Insitute of Technology*, Professor: Robert Berwick.

Implemented a system for solving SAT analogy problems in cognitively-motivated way.

Summer 2012 **Bioengineering Systems and Technologies Group**, *MIT Lincoln Laboratory*, Undergraduate Researcher, Advisor: Thomas Quatieri.

Developed a psycholinguistic behavioral experiment for investigating the connection between language and motor control.

Skills

Programming Proficient in R, Python, JavaScript; familiar with SQL, Java, MATLAB, Scheme.

Tools Linux, Git, Subversion, EC2, Apache, HTML, CSS, LaTeX.

Languages Native English and Russian, conversational Hebrew.

Publications

Frank, M. C., **Braginsky, M.**, Yurovsky, D., and Marchman, V. A. (under review). Wordbank: An open repository for developmental vocabulary data.

Braginsky, M., Yurovsky, D., Marchman, V. A., and Frank, M. C. (2015). Developmental changes in the relationship between grammar and the lexicon. In *Proceedings of the 37th Annual Conference of the Cognitive Science Society*.

Posters and Talks

Braginsky, M., Yurovsky, D., Marchman, V. A., and Frank, M. C. (2015). Developmental changes in the relationship between grammar and the lexicon. Poster presented at the 37th Annual Conference of the Cognitive Science Society. Pasadena, CA.

Frank, M. C., Yurovsky, D., Schneider, R., **Braginsky, M.**, and Marchman, V. A. (2015). Studying children's vocabulary development at scale. Talk presented by Michael Frank at the 2015 Society for Research in Child Development Biennial Meeting. Philadephia, PA.

Frank, M. C., Yurovsky, D., Krishna, R., **Braginsky, M.**, and Marchman, V. A. (2014). Wordbank: An open repository for developmental vocabulary data. Poster presented by Michael Frank at the 39th Annual Boston University Conference on Language Development. Boston, MA.

Coursework

Massachusetts Institute of Technology

Cognitive Science & Linguistics

- Topics in Language Acquisition
- Laboratory in Psycholinguistics
- Computational Cognitive Science
- Semantics and Pragmatics
- Phonology
- Music Cognition
- What Is Intelligence?
- Philosophical Issues in Brain Science

Computer Science & Mathematics

- Practical Natural Language Processing
- Natural Language and the Representation of Knowledge
- Artificial Intelligence
- Design and Analysis of Algorithms
- Computer Systems Engineering
- Introduction to Inference
- Probability and Random Variables
- Linear Algebra

Linguistic Summer Institute 2015

- Computational Psycholinguistics
- Computational Lexical Semantics
- Unsupervised Learning of Linguistic Structure: Morphology
- Making the Most of Extant Data in Early Language Acquisition Research