Jessica B. Hamrick · Curriculum Vitae

Website: http://www.jesshamrick.com/
Email: jhamrick@berkeley.edu

EDUCATION

University of California, Berkeley. Berkeley, CA
Pursuing a Ph.D. in Psychology, August 2012 – present.
Advisor: Thomas L. Griffiths

Massachusetts Institute of Technology. Cambridge, MA
B.S. in Computer Science and Engineering, June 2012 (GPA: 4.4/5.0)
Academic Advisor: Gerald Jay Sussman

M.Eng. in Electrical Engineering and Computer Science, June 2012 (GPA: 5.0/5.0)
Thesis Advisor: Joshua B. Tenenbaum

ACADEMIC POSITIONS

Graduate Researcher *August 2012 – present*
University of California, Berkeley (Advisor: Thomas L. Griffiths)

Research Assistant *June 2011 – July 2012*
Undergraduate Researcher *January 2009 – May 2011*
Massachusetts Institute of Technology (Advisor: Joshua B. Tenenbaum)

Undergraduate Researcher *June 2008 – December 2009*
Personal Robotics Group – MIT Media Lab (Advisor: Cynthia Breazeal)

FELLOWSHIPS AND GRANTS

- National Science Foundation Graduate Fellowship (three years, 2014–2017), tuition and stipend. Awarded April 2013.
- Berkeley Fellowship, University of California Berkeley (two years, 2012–2014), tuition and stipend. Awarded March 2012.

PUBLICATIONS

- Battaglia P. W., **Hamrick J. B.**, & Tenenbaum J. B. (in press). Simulation as an engine of physical scene understanding. *Proceedings of the National Academy of Sciences*.
- Abbott J. T., **Hamrick J. B.**, & Griffiths T. L. (2013). Approximating Bayesian inference with a sparse distributed memory system. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
- **Hamrick J. B.** (2012). Physical reasoning in complex scenes is sensitive to mass. M.Eng. thesis, Massachusetts Institute of Technology, Cambridge, MA.
- **Hamrick J. B.**, Battaglia P. W., & Tenenbaum J. B. (2011). Internal physics models guide probabilistic judgments about object dynamics. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.

CONFERENCE PRESENTATIONS

- **Hamrick J. B.**, Battaglia P. W., Griffiths T. L, & Tenenbaum J. B. (2013, August). Inferring mass in complex physical scenes via probabilistic simulation. Talk presented by Jessica Hamrick at the 46th Annual Meeting of the Society of Mathematical Psychology. Potsdam, Germany.
- **Hamrick J. B.**, Battaglia P. W., Griffiths T. L, & Tenenbaum J. B. (2013, August). Inferring mass in complex physical scenes via probabilistic simulation. Poster presented by Jessica Hamrick at the 35th Annual Conference of the Cognitive Science Society. Berlin, Germany.
- Abbott J. T, **Hamrick J. B.**, & Griffiths T. L. (2013, August). Approximating Bayesian inference with a sparse distributed memory system. Poster presented by Joshua Abbott at the 35th Annual Conference of the Cognitive Science Society. Berlin, Germany.

- Battaglia P. W., **Hamrick J. B.**, & Tenenbaum J. B. (2012, May). Intuitive mechanics in visual reasoning about complex scenes with unknown forces. Poster presented by Peter Battaglia at Annual Meeting of the Vision Sciences Society. Naples, FL.
- **Hamrick J. B.**, Battaglia P. W., & Tenenbaum J. B. (2012, May). Physics knowledge aids object perception in dynamic scenes. Poster presented by Jessica Hamrick at Annual Meeting of the Vision Sciences Society. Naples, FL.
- **Hamrick J. B.**, Battaglia P. W., & Tenenbaum J. B. (2011, July). Internal physics models guide probabilistic judgments about object dynamics. Paper presented at the 33rd Annual Conference of the Cognitive Science Society. Boston, MA.
- Battaglia P. W., **Hamrick J. B.**, & Tenenbaum J. B. (2011, May). Intuitive physics judgments guided by probabilistic dynamics model. Poster presented by Peter Battaglia at the Annual Meeting of the Vision Sciences Society. Naples, FL.

TEACHING

- Python FUNdamentals (August 19-22, 2013)
  `https://github.com/dlab-berkeley/python-fundamentals`
  Helper for a crash course teaching introductory Python to gradate students at UC Berkeley.
- Software Carpentry (April 13-14, 2013)
  `http://software-carpentry.org/`
  Helper for a boot camp teaching scientists computer skills in Python programming, Git version control, testing, the command line, and data management.
- Python for Computational Cognitive Science (Summer 2012).
  `https://github.com/jhamrick/python-course`
  Co-instructor for a crash course in scientific Python for computational cognitive science at MIT.
- Boston Python Workshop (May, July, and December 2011)
  `http://openhatch.org/wiki/Boston_Python_Workshop`
  Helper for workshops teaching Python to women and their friends.

SERVICE AND SOCIETIES

- Cognitive Science Society (July 2011 – Present), Student Member
  `http://www.cognitivesciencesociety.org/`
- Sigma Xi (May 2011 – Present), Junior Member
  `http://www.sigmaxi.org/`
- MIT Student Information Processing Board (September 2008 – June 2012)
  Volunteer student computing group, `http://sipb.mit.edu/`
  - Associate Member (June 2012 – present)
  - Full Member (February 2009 – June 2012). I helped other students with computer problems and worked on multiple service projects, including Gutenbach, MIT$\LaTeX$, Debathena (MIT's operating system), and Dodona. I also co-taught a class on the structure of the internet in January 2009.
  - Executive Committee (February 2009 – February 2012)
  - Chair (February 2010 – February 2011). While I was Chair, SIPB received the Karl Taylor Compton prize, MIT's most prestigious award given to students or student groups.