Joshua L. Moore

jlmo@cs.cornell.edu

Education: August 2010 to Present	• Cornell University, Ithaca, NY ◦ PhD Computer Science ◦ Recipient of the NSF Graduate Research Fellowship ◦ Recipient of the McMullen departmental fellowship ◦ Expected graduation: May 2015
August 2006 to May 2010	• Georgia Institute of Technology, Atlanta, GA ◦ B.S. Computer Science, B.S. Applied Mathematics ◦ Graduated with highest honors
October 2007 to July 2008	• Technical University of Munich, Germany ◦ Foreign Exchange Study
Work History: August 2010 to Present	• PhD student, Cornell University ◦ Researched embedding methods for data analysis tasks, efficient training procedures for embedding methods, playlist prediction, and music information retrieval with Professor Thorsten Joachims (Department of Computer Science). *Best student paper award at ISMIR 2014.* ◦ Researched randomized algorithms for efficient, large-scale, high-dimensional machine learning with Assistant Professor Ping Li, Department of Statistical Science. Work published at NIPS 2011
May 2014 to August 2014	• Software Engineering Intern in search learning group, Facebook, Inc., Menlo Park, CA, USA ◦ Implemented new extensions of learning to rank algorithms for search and performed experiments to train optimal models ◦ Obtained models with improved performance metrics for user-facing search components
May 2013 to August 2013	• Research Intern, Microsoft Research, Redmond, WA, USA ◦ Researched scalable models of meaning in natural language processing tasks, in particular for the problem of animacy detection. Supervised by Christopher J. C. Burges ◦ Published and presented work at the Conference on Empirical Methods in Natural Language Processing (EMNLP) 2013, Seattle, WA
May 2012 to August 2012	• Software Engineering Intern in Research, Google, Inc., Mountain View, CA, USA ◦ Research in large-scale machine learning methods for YouTube
May 2011 to August 2011	• Software Engineering Intern, Google, Inc., Mountain View, CA, USA ◦ Implemented distributed machine learning methods for Google Maps
June 2010 to August 2010	• Intern, Siemens AG Corporate Technology, Munich, Germany ◦ Researched random walk based graph search methods and developed (in a team) a piece of software relating to the smart grid. Supervised by Prof. Dr. Volker Tresp ◦ Published work at ESWC 2011 workshop, IRMLeS 2011

August 2008 to May 2010	• Undergraduate research assistant, Georgia Institute of Technology ◦ Advised by Professor James M. Rehg ◦ Collected data and designed, coded, and performed experiments in machine learning applied to computer vision and robotics ◦ Published in the International Journal of Robotics Research, 2010
January 2008 to July 2008	• Undergraduate research assistant, Technical University of Munich ◦ Implemented and tested image segmentation algorithms for a PhD student in Prof. Dr. Nassir Navab's Computer-Aided Medical Practices and Augmented Reality (CAMPAR) group
Publications:	• J. L. Moore, T. Joachims, D. Turnbull, "Taste Space Versus the World: an Embedding Analysis of Listening Habits and Geography," International Society for Music Information Retrieval (ISMIR) Conference, October 2014. ◦ **Best Student Paper Award** • J. L. Moore, S. Chen, T. Joachims, D. Turnbull, "Taste Over Time: the Temporal Dynamics of User Preferences," ISMIR, November 2013 • J. L. Moore, C. J. C. Burges, E. Renshaw, W. T. Yih, "Animacy Detection with Voting Models," Conference on Empirical Methods in Natural Language Processing (short paper), October 2013 • J. L. Moore, S. Chen, T. Joachims, D. Turnbull, "Learning to Embed Songs and Tags for Playlist Prediction," ISMIR, October 2012 • S. Chen, J. L. Moore, T. Joachims, D. Turnbull, "Playlist Prediction via Metric Embedding," KDD, August 2012 • J. L. Moore, S. Chen, T. Joachims, D. Turnbull, "Embedding Songs and Tags for Playlist Prediction (extended abstract)," Music and Machine Learning Workshop at ICML, June/July 2012 • P. Li, A. Shrivastava, J. L. Moore, A. C. König, "Hashing Algorithms for Large-Scale Learning," NIPS 2011 • J. L. Moore, F. Steinke, V. Tresp, "A Novel Metric for Information Retrieval in Semantic Networks," Inductive Reasoning and Machine Learning for the Semantic Web (IRMLeS) 2011 • J. Sun, J. L. Moore, A. Bobick, J. M. Rehg, "Learning Visual Categories for Robot Affordance Prediction," *International Journal of Robotics Research*, February 2010
Teaching:	• Teaching assistant for CS 6784 – Advanced Topics in Machine Learning (instructor: Thorsten Joachims) at Cornell University, Spring 2014 • Guest lecture for CS/INFO 4300 – Information Retrieval (instructor: Claire Cardie) at Cornell University, Fall 2013 • Teaching assistant for CS 4780/5780 – Machine Learning (instructor: Thorsten Joachims) at Cornell University, Fall 2012
Skills:	• C/C++, MATLAB, MapReduce, Java, Go, Linux, Bash, Python, native English speaker, fluent in German
Sample of Coursework:	• Advanced Machine Learning, Computer Vision, Approximation Algorithms, Operating Systems, Analysis of Algorithms, Real Analysis, Combinatorial Analysis, Numerical Analysis, Topology, Graph Theory, Complex Analysis, Probability and Statistics, Semantics I (linguistics), Syntax I (linguistics), Morphology (linguistics)