

*My research uses statistical data analysis, machine learning, and web-based experimental design to explore human behavior using large-scale data from the web. I am completing a Ph.D. in cognitive science, with an emphasis on computational social science, and my work combines the tools of data science with an understanding of human decision making and other cognitive processes.*

## EDUCATION

Joint Ph.D. in Cognitive Science and Cognitive Psychology  
Indiana University, Bloomington, Spring 2016 (expected), 4.00 GPA. NSF IGERT Fellowship recipient

B.A. with high honors in Cognitive Science and high distinction in general scholarship  
University of California, Berkeley, 2009, 3.85 GPA.

## PROJECTS & EXPERIENCE

Contract data scientist, StumbleUpon.com (July 2015 - Present, data science intern April 2015 - July 2015)

***Personas Discovery*** Developed a framework for characterization and identification of SU user “personas” (canonical interest profiles), in collaboration with data science, engineering, and user experience teams.

Graduate student researcher, Adaptive Behavior and Cognition Lab, Indiana University (August 2010 - Present)

***Music listening and tagging patterns on Last.fm*** (Dissertation work). Analyzing a large scale dataset from the social music service Last.fm, I study how users listen to and organize music in a social environment.

***Color preferences of Flickr users*** This project explores gender differences in color preferences by analyzing very large datasets of photos from the photo-sharing website Flickr.com.

Graduate student researcher, IARPA SIRIUS Program (August 2011 - March 2015)

***Heuristica*** Contributed to development and testing of a high-fidelity serious game that teaches players to recognize and mitigate negative decision making biases. Responsibilities included consulting on development game modules and analysis of player behavioral data.

Research scientist student, User Intent Analysis Group, Yahoo! Labs (July 2011 - March 2012, Faculty Research and Engagement Program grant recipient)

***SearchPaths*** Developed and tested a novel social search interface inspired by path-following in ecological contexts.

## SKILLS

Preferred data analysis environment: Python (including Pandas, Graphlab Create, Scipy, Numpy, etc.)

Statistical analysis, machine learning, and visualization (Python, Spark)

Web data mining and database maintenance/development (Python, MySQL, Hive)

Other skills: Multi-agent model design; topic modeling; experimental design (In-lab psychological studies, Amazon Mechanical Turk); report writing (L<sup>A</sup>T<sub>E</sub>X); basic web design tools (HTML, CSS, Javascript); other data analysis tools (Unix, Bash scripting)

## PEER-REVIEWED PUBLICATIONS

Lorince, J. & Todd, P. M. (in press). Music Tagging and Listening: Testing the Memory Cue Hypothesis in a Collaborative Tagging System. In Jones, M. N. (Ed.), *Big Data in Cognitive Science: From Methods to Insights* (pp. xxx-xxx). New York, NY: Psychology Press (Taylor & Francis).

Lorince, J., Zorowitz, S., Murdock, J., & Todd, P. M. (2015). The Wisdom of the Few? “Supertaggers” in Collaborative Tagging Systems. *The Journal of Web Science*, 1(1), pp. 16-32.

Lorince, J., Joseph, K., & Todd, P. M. (2015). Analysis of music tagging and listening patterns: Do tags really function as retrieval aids?. In *Proceedings of the 8th Annual Social Computing, Behavioral-Cultural Modeling and Prediction Conference (SBP 2015)* (pp. 141-152). Springer International Publishing.

Lorince, J., Zorowitz, S., Murdock, J., & Todd, P. M. (2014). “Supertagger” behavior in building folksonomies. In *Proceedings of the 6th Annual ACM Web Science Conference (WebSci 2014)* (pp. 129-138). ACM.

Lorince, J., Donato, D., & Todd, P. M. (2014). Path Following in Social Web Search. In *Proceedings of the 7th Annual Social Computing, Behavioral-Cultural Modeling and Prediction Conference (SBP 2014)* (pp. 119-127). Springer International Publishing.

Lorince, J., & Todd, P. M. (2013). Can simple social copying heuristics explain tag popularity in a collaborative tagging system? In *Proceedings of the 5th Annual ACM Web Science Conference (WebSci 2013)* (pp. 215-224). ACM.

Mullinix, G., Gray, O., Colado, J., Veinott, E., Leonard, J., Papautsky, E. L., . . . , Lorince, J., et al. (2013). Heuristica: Designing a serious game for improving decision making. In *Proceedings of the 2013 IEEE Games Innovation Conference (IGIC)* (pp. 250-255). IEEE.

Veinott, E. S., Leonard, J., Papautsky, E. L., Perelman, B., Stankovic, A., Lorince, J., et al. (2013). The effect of camera perspective and session duration on training decision making in a serious video game. In *Proceedings of the 2013 IEEE Games Innovation Conference (IGIC)* (pp. 256-262). IEEE.

## SERVICE

Reviewer, Transactions on Computer-Human Interaction, ACM

Reviewer, Topics in Cognitive Science (TopiCS), Cognitive Science Society.

Reviewer, Behavioral Research Methods, The Psychonomic Society.

Program Committee, International Conference on Computational Social Science (ICCSS 2016)

Program Committee, International Conference on Computational Social Science (ICCSS 2015)

Program Committee, Computational Social Science Workshop (CSS 2014) at ECCS 2014.

Program Committee, 6th Annual ACM Web Science (WebSci 2014).

Program Committee, Computational Approaches to Social Modeling Workshop (ChASM 2014) at WebSci 2014.

Publicity Committee, 6th Annual ACM Web Science (WebSci 2014).

## RELEVANT COURSEWORK

Web Data Mining, Large Scale Social Phenomena, Bayesian Data Analysis, Choice Behavior, Multiagent Modeling of Social Behavior, Information Networks, Advanced Statistics in Psychology, Theory and Practice in Game Design, Math and Logic in Cognitive Science, Programming for Cognitive Science, Models in Cognitive Science

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<http://bit.ly/jlorinceCV>