

Andrew Thomas Hendrickson

Department of Cognitive Science and Artificial Intelligence, Tilburg University
Dante Building, Room D336, Tilburg, Netherlands
a.hendrickson@tilburguniversity.edu

RELEVANT EMPLOYMENT *Assistant Professor* March 2017 - present
Department of Cognitive Science and Artificial Intelligence Jan 2018 - present
Department of Communication and Information Sciences March 2017 - Dec. 2017
Tilburg University, Netherlands

Postdoctoral researcher November 2015 - February 2017
Computational Cognition Lab with Profs Amy Perfors and Danielle Navarro
School of Psychology, University of Adelaide, Australia

Research Scientist September 2012 - November 2015
Computational Cognition Lab with Profs Amy Perfors and Danielle Navarro
School of Psychology, University of Adelaide, Australia

Course Instructor September 2008 - December 2010
Indiana University, Bloomington, Indiana, USA
Research Methods (two sections) and Cognitive Psychology (two semesters)

Teaching Assistant September 2007 - May 2012
Indiana University, Bloomington, Indiana, USA
Introduction to Psychology, Introduction to Statistics, and Cognitive Psychology

EDUCATION *Ph.D., Psychological and Brain Sciences & Cognitive Science* November 2015
Advisors: Prof Robert Goldstone, Prof Peter Todd
Indiana University, Bloomington, Indiana, USA

B.S., Computer Science & Cognitive Psychology May 2005
Carnegie Mellon University, Pittsburgh, PA, USA

ACCEPTED PAPERS

1. **Hendrickson, A.T.**, Perfors, A. (in press). Cross-situational learning in a Zipfian environment. *Cognition*.
2. **Hendrickson, A.T.**, Perfors, A., Navarro, D.J. (in press). Sample size, number of categories and sampling assumptions: Exploring some differences between categorization and generalization. *Cognitive Psychology*.
3. Vong, W. K., **Hendrickson, A. T.**, Navarro, D. J., and Perfors, A. (in press). Do additional features help or hurt category learning? the curse of dimensionality in human learners. *Cognitive Science*.
4. Stragier, J., Abeele, M. V., **Hendrickson, A. T.**, and Marez, L. D. (2019). Unlock, chat, lock. A Markov chain analysis to unveil how smartphone use unfolds

in everyday life. In Proceedings of the 69th Annual Meeting of the International Communication Association.

5. **Hendrickson, A. T.**, Marez, L. D., Martens, M., Muller, G., Ponnet, K., Schweitzer, C., and Abeele, M. V. (2019). How do people use their smartphone? a data scientific approach to describe and identify user-related, system-related and context-related patterns in use. In Proceedings of the 69th Annual Meeting of the International Communication Association.
6. **Hendrickson, A. T.**, Wang, J., and Atzmueller, M. (2018). Identifying exceptional descriptions of people using topic modeling and subgroup discovery. In the International Symposium on Methodologies for Intelligent Systems.
7. Heyer, R., Semmler, C., and **Hendrickson, A. T.** (2018). Humans and algorithms for facial recognition: The effects of candidate list length and experience on performance. *Journal of Applied Research in Memory and Cognition*.
8. Ransom, K., **Hendrickson, A. T.**, Perfors, A., and Navarro, D. J. (2018). Representational and sampling assumptions drive individual differences in single category generalisation. In Proceedings of the 40th Annual Meeting of the Cognitive Science Society.
9. Langsford, S., Perfors, A., Kennedy, L., **Hendrickson, A.T.**, Navarro, D.J., (2018) A systematic comparison and reliability analysis of formal measures of sentence acceptability. *Glossa: a journal of general linguistics*, 3 (1), 37.
10. Langsford, S., **Hendrickson, A.T.**, Navarro, D.J., Perfors, A., (2017). When do learned transformations influence similarity and categorization? Proceedings of the 39th Annual Conference of the Cognitive Science Society.
11. **Hendrickson, A.T.**, Navarro, D.J., Perfors, A. (2016). Sensitivity to hypothesis size during information search. *Decision*, 3(1), 62-80.
12. Vong, W.K., **Hendrickson, A.T.**, Perfors, A., Navarro, D.J. (2016). Do additional features help or harm during category learning? An exploration of the curse of dimensionality in human learners. Proceedings of the 37th Annual Conference of the Cognitive Science Society. **Winner of the 2016 Marr Prize for computational modeling.**
13. **Hendrickson, A.T.**, Navarro, D.J., Donkin, C. (2015). Quantifying the time course of similarity. In DC Noelle, R Dale, AS Warlaumont, J Yoshimi, T Matlock, CD Jennings and PP Maglio (Ed.) Proceedings of the 37th Annual Conference of the Cognitive Science Society (pp. 908-913).
14. **Hendrickson, A.T.**, Perfors, A., Navarro, D. J. (2014). Adaptive information source selection during hypothesis testing. In P Bellow, M Guarani, M McShane and B Scassellati (Ed.) Proceedings of the 36th Annual Conference of the Cognitive Science Society. (pp. 607-612).
15. Langsford, S., **Hendrickson, A.T.**, Perfors, A., Navarro, D. J. (2014). People are sensitive to hypothesis sparsity during category discrimination. In P Bellow, M Guarani, M McShane and B Scassellati (Ed.) Proceedings of the 36th Annual Conference of the Cognitive Science Society. (pp. 2531-2536).
16. Todd, P. M., Hills, T. T., **Hendrickson, A.T.** (2013). Modeling reproductive decisions with simple heuristics. *Demographic Research*, 29, 641-661.
17. Vong, W.K., **Hendrickson, A.T.**, Perfors, A., Navarro, D. J. (2013). The role of sampling assumptions in generalization with multiple categories. In M Knauff, M Pauen, N Sebanz and I Wachsmuth (Ed.) Proceedings of the 35th Annual Conference of the Cognitive Science Society (pp. 3699-3704).

18. **Hendrickson, A.T.**, Carvalo, P. F, Goldstone, R. L. (2012). Going to extremes: The influence of unsupervised categories on the mental characterization of faces and asymmetries in perceptual discrimination. Proceedings of the 34th Annual Conference of the Cognitive Science Society. (pp. 1662-1667).
19. **Hendrickson, A.T.**, Kachergis, G., Faucey, C. M., Goldstone, R. L. (2012) Re-learning labeled categories reveals structured representations. Proceedings of the 34th Annual Conference of the Cognitive Science Society. (pp. 1668-1673).
20. **Hendrickson, A.T.**, Todd, P. M., Fortenberry, J. D. (2010) Modeling decision making in mate choice within and across relationships. Proceedings of the 22nd annual meeting of the Human Behavior and Evolution Society.
21. **Hendrickson, A.T.**, Kachergis, G., Gureckis, T. M., Goldstone, R. L. (2010) Is categorical perception really verbally mediated perception? Proceedings of the 32nd Annual Conference of the Cognitive Science Society. (pp. 1216-1221).
22. Goldstone, R. L., **Hendrickson, A.T.** (2009) Categorical Perception. Wiley Interdisciplinary Reviews: Cognitive Science, 1, 69-78.
23. **Hendrickson, A.T.**, Goldstone, R. L. (2009) Perceptual Unitization in Part-Whole Judgments. Proceedings of the 31st Annual Conference of the Cognitive Science Society. (pp. 1084-1089).
24. **Hendrickson, A.T.**, Goldstone, R. L. (2007) Feature Learning Within Categorization. Proceedings of the 29th Annual Conference of the Cognitive Science Society.

PAPERS UNDER REVIEW

1. **Hendrickson, A.T.**, Navarro, D.J., Donkin, C. (under review). Evidence accumulation in same-different judgments: Integrating featural similarity with structural knowledge using a linear ballistic accumulator. Cognitive Psychology.
2. **Hendrickson, A.T.** and Semmler, C. (under review). Similarity and set size impact the efficiency of hypothesis testing among faces.
3. Khoe, Y. H., Perfors, A., and **Hendrickson, A.T.** (under review). Modeling individual performance in cross-situational word learning.

ADMIN

Master's thesis coordinator September 2018 - now
 Programs of Data Science & Society and Cognitive Science & Artificial Intelligence
 Tilburg University

TEACHING

Advanced Data Processing in Python Spring 2017, 2018, 2019
 Tilburg University

Introduction to Cognitive Science Fall 2017, 2018
 Tilburg University

Introduction to Statistics in R Fall 2017
 Tilburg University

Perception and Cognition October 2016
 University of Adelaide

Workshop on implementing online experiments 2014 & 2015
Presenter and primary organizer
Annual Meeting of the Australasian Society for Experimental Psychology (2015)
University of Adelaide (2014)

Cognitive Psychology Fall 2009, Fall 2010
Indiana University

Research Methods for Experimental Psychology Spring 2008
Indiana University

Guest Lectures at Indiana University
Introduction to Statistics; Introduction to Psychology

GRANTS

Advancing Society: IMPACT Health & Wellbeing (€250,000) 2018-2021
Are smartphones destroying a generation? A longitudinal cohort study on the relationship between smartphone use and adolescents health wellbeing using logging, mobile experience sampling, and machine learning
Tilburg University

ARC Discovery Project (AUS\$290,011) 2018-2020
Where do inductive biases come from? A Bayesian investigation
Australian Research Council (ARC)

Creative industry - Knowledge Innovation Mapping (€18,000) 2018
Keeping struggling students from illiteracy using design thinking
Netherlands Organisation for Scientific Research (NWO) and CLICKNL

Interdisciplinary Research Infrastructure Block Grant (\$20,000) 2016
Decision making in real life: the case of vaccinating children – uncertainty, perceived risk, and regret
University of Adelaide

Interdisciplinary Research Funding Scheme (\$19,586) 2016
Understanding human-technology interactions to aid in the use of unconstrained imagery for identification
University of Adelaide

Research Infrastructure Block Grant (\$11,000) 2012
Assessing the consistency of generalization across individuals
University of Adelaide

Student Research Grant Award (\$3,000) 2010
The Kinsey Institute, Indiana University

SUPERVISION I currently supervise one PhD student, George Aalbers. I previously supervised three PhD students at the University of Adelaide (Steven Langsford, Lauren Kennedy, and Wai Keen Vong) who successfully completed their theses in 2017 and 2018.

I supervise Master's students in both the Cognitive Science & Artificial Intelligence and the Data Science & Society thesis tracks.

AWARDS *Teacher of the Year* 2017
Department of Cognitive Science & Artificial Intelligence
Tilburg University

Research Experience Award (\$3,000, declined) 2012
National Science Foundation

Research Travel Fellowship (\$1,500) 2011
National Science Foundation & Cognitive Science Society

Pre-doctoral Training Award (\$20,000) 2010 - 2011
Indiana Clinical and Translational Research Institute, Indiana University

IGERT Fellowship 2010 - 2015
National Science Foundation & Indiana University

**AD HOC
REVIEWING** Adaptive Behavior, Behavior Research Methods, Cognitive Science, Cortex, Decision, Frontiers in Psychology, Journal of Experimental Psychology: General, Memory and Cognition, Psychological Bulletin, Proceedings of the Cognitive Science Society

MEMBERSHIPS Cognitive Science Society, Society for Mathematical Psychology

References and teaching evaluations available upon request.