Andrew Hendrickson

Department of Cognitive Science and Artificial Intelligence, Tilburg University Dante Building, Room D336, Tilburg, Netherlands dhendrickson@gmail.com http://drewhendrickson.github.io

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 and Cognitive Psychology

Teaching Assistant

September 2007 - May 2012

Indiana University, Bloomington, Indiana, USA

Introduction to Psychology, Introduction to Statistics, and Cognitive Psychology

EDUCATION

Ph.D., Cognitive Science & Psychological and Brain Sciences Advisors: Prof Robert Goldstone, Prof Peter Todd

November 2015

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

Indiana University, Bloomington, Indiana, USA

May 2005

- PUBLICATIONS 1. Khoe, Y. H., Perfors, A., and Hendrickson, A.T. (in press). Modeling individual performance in cross-situational word learning. In Proceedings of the 41st Annual Meeting of the Cognitive Science Society.
 - 2. Hendrickson, A.T., Perfors, A. (in press). Cross-situational learning in a Zipfian environment. Cognition.
 - 3. 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.

- 4. 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*.
- 5. 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*.
- 6. 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.
- 7. **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*.
- 8. 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*.
- 9. 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*.
- 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.
- 11. Langsford, S., **Hendrickson**, **A.T.**, Navarro, D.J., Perfors, A., (2017). When do learned transformations influence similarity and categorization? In *Proceedings of the 39th Annual Conference of the Cognitive Science Society*.
- 12. **Hendrickson, A.T.**, Navarro, D.J., Perfors, A. (2016). Sensitivity to hypothesis size during information search. *Decision*, 3(1), 62-80.
- 13. 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. In *Proceedings of the 37th Annual Conference of the Cognitive Science Society*. Winner of the 2016 Marr Prize for computational modeling.
- 14. **Hendrickson, A.T.**, Navarro, D.J., Donkin, C. (2015). Quantifying the time course of similarity. In *Proceedings of the 37th Annual Conference of the Cognitive Science Society*.
- 15. **Hendrickson, A.T.**, Perfors, A., Navarro, D. J. (2014). Adaptive information source selection during hypothesis testing. In *Proceedings of the 36th Annual Conference of the Cognitive Science Society*.
- 16. Langsford, S., **Hendrickson**, **A.T.**, Perfors, A., Navarro, D. J. (2014). People are sensitive to hypothesis sparsity during category discrimination. In *Proceedings* of the 36th Annual Conference of the Cognitive Science Society.
- 17. Todd, P. M., Hills, T. T., **Hendrickson, A.T.** (2013). Modeling reproductive decisions with simple heuristics. *Demographic Research*, 29, 641-661.
- 18. Vong, W.K., **Hendrickson, A.T.**, Perfors, A., Navarro, D. J. (2013). The role of sampling assumptions in generalization with multiple categories. In *Proceedings* of the 35th Annual Conference of the Cognitive Science Society.

- 19. 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. In Proceedings of the 34th Annual Conference of the Cognitive Science Society.
- 20. Hendrickson, A.T., Kachergis, G., Faucey, C. M., Goldstone, R. L. (2012) Relearning labeled categories reveals structured representations. In Proceedings of the 34th Annual Conference of the Cognitive Science Society
- 21. Hendrickson, A.T., Todd, P. M., Fortenberry, J. D. (2010) Modeling decision making in mate choice within and across relationships. In Proceedings of the 22nd annual meeting of the Human Behavior and Evolution Society.
- 22. Hendrickson, A.T., Kachergis, G., Gureckis, T. M., Goldstone, R. L. (2010) Is categorical perception really verbally mediated perception? In Proceedings of the 32nd Annual Conference of the Cognitive Science Society.
- 23. Goldstone, R. L., Hendrickson, A.T. (2009) Categorical Perception. Wiley Interdisciplinary Reviews: Cognitive Science, 1, 69-78.
- 24. Hendrickson, A.T., Goldstone, R. L. (2009) Perceptual Unitization in Part-Whole Judgments. In Proceedings of the 31st Annual Conference of the Cognitive Science Society
- 25. Hendrickson, A.T., Goldstone, R. L. (2007) Feature Learning Within Categorization. In Proceedings of the 29th Annual Conference of the Cognitive Science Society.

REVIEW

- PAPERS UNDER 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. Vanden Abeele, M.M.P, Hendrickson, A.T., Pollmann, M.M., Ling, R. Phubbing behavior in conversations and its relation to perceived conversation intimacy and distraction: An exploratory observation study. Computers in Human Behavior.

TEACHING

Advanced Data Processing in Python Tilburg University

Spring 2017, 2018, 2019

Introduction to Cognitive Science Tilburg University

Fall 2017, 2018

Introduction to Statistics in R Tilburg University

Fall 2017

Perception and Cognition University of Adelaide

October 2016

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 Indiana University Fall 2009, 2010

Research Methods for Experimental Psychology

Spring 2008

Indiana University

Guest Lectures at Indiana University

Introduction to Statistics; Introduction to Psychology

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

 $Pre\text{-}doctoral\ Training\ Award\ (\$20{,}000)$

2010 - 2011

Indiana Clinical and Translational Research Institute, Indiana University

IGERT Fellowship

2010 - 2015

National Science Foundation & 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 roughly 20 Master's students per year. They come from both the Cognitive Science & Artificial Intelligence and the Data Science & Society Master's thesis programs. Please see my webpage for sample theses.

ADMIN Master's thesis coordinator

September 2018 - now

Programs of Data Science & Society and Cognitive Science & Artificial Intelligence

Tilburg University

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) The Kinsey Institute, Indiana University 2010

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, International Communication Association

References and teaching evaluations available upon request.