

George Kachergis

Research Scientist, Language & Cognition Lab
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Academic Positions

- Research Scientist, Language and Cognition Lab, Stanford University, *September 2018–present*.
- Assistant Professor, Department of Artificial Intelligence and Donders Institute for Brain, Cognition, and Behaviour, Radboud University, *September, 2016–August, 2018*.
- Postdoctoral Researcher on active sensemaking, New York University, Advisors: Todd Gureckis and Marjorie Rhodes, Varieties of Understanding Project, *January, 2015–August, 2016*.
- Postdoctoral Researcher on knowledge representation, Leiden University, Advisor: Bernhard Hommel, RoboHow Project, *January, 2013–December 2014*.
- Research Assistant, Memory and Perception Lab, Indiana University, *August, 2007–December, 2012*.
- Research Assistant, Department of Computer Science, Carleton College, *June–August, 2006*.

Education

- Ph.D. (December 15, 2012), Indiana University, Department of Psychological and Brain Sciences and Cognitive Science Program. Advisors: Richard M. Shiffrin and Chen Yu.
- Probabilistic Models of Cognition Summer School, Institute for Pure and Applied Mathematics, UCLA, 2011.
- B.A. Cognitive Studies, Carleton College, 2007. *Magna cum laude* with distinction.
- B.A. Computer Science, Carleton College, 2007. *Magna cum laude*.
- Budapest Semester in Cognitive Science, Eötvös Loránd Science University, Fall 2005.

Awards and Grants

- **Stanford Human-centered AI Seed Grant**, Learning to play: Understanding infant development with intrinsically motivated artificial agents (\$75,000), *Spring 2019*
- **NVIDIA GPU Grant**, *Spring 2017*
- **Global TIES for Children Seed Award**, Testing an Adaptive Tablet Game System for Self-guided Literacy and Numeracy Education in Developing Nations (\$12,000), *Fall 2016*

- **Institute of Human Development and Social Change Seed Award**, Applying Computer Science Models of Self-Directed Learning to New Measures of Young Children's Academically-Oriented Soft Skills (\$9,280), *Fall 2015*
- **Irving J. Saltzman Award for Outstanding Graduate Achievement**, Indiana University Psychology Department, *2015*
- **Robert J. Glushko Dissertation Prize** for outstanding interdisciplinary work (\$10,000), *2013*
- **Best Paper: Experiment Combined with Computational Model, International Conference on Development and Learning-EpiRob**, *2012*
- **Marr Prize for Best Student Paper, Cognitive Science Society**, *2012*
- **National Science Foundation East Asia & Pacific Summer Institute / Japan Society for the Promotion of Science** (OISE-1209475; JAIST, (~\$10,000), *2012*
- **Robert J. Glushko and Pamela Samuelson Foundation Student Travel Grant**, Cognitive Science Society, *2012*
- **William K. Estes Summer Research Award**, Indiana University Psychology Department, *2011*
- **European Neural Network Society Student Travel Award**, *2011*
- **Society for Mathematical Psychology Student Travel Award**, *2009, 2010, 2011*
- **Indiana University Cognitive Science Supplemental Research Fellowship**, *2009, 2011*

Publications

Journal Articles

1. Long, B., Frank, M. C., Lai, E., Chan, P., Wong, P., and *Kachergis, G.* (submitted). *Consistency and variability between cultures during toddlers' naturalistic play.*
2. Blokpoel, M., Dingemanse, M., Kachergis, G., Bögels, S., Toni, I., van Rooij, I., and the CABB team. (submitted). *Pragmatic communicators can overcome asymmetry by exploiting ambiguity.*
3. Hidaka, S., Torii, T., and **Kachergis, G.** (submitted). *Active learners can learn what simple samplers cannot: A Zipf-distributed vocabulary from limited data.*
4. Mahowald, K., **Kachergis, G.**, and Frank, M. C. (2020). *What counts as an exemplar model, anyway? A commentary on Ambridge (2020).* First Language. doi: 10.1177/0142723720905920.
5. de Kleijn, R., van Es, L., **Kachergis, G.**, and Hommel, B. (2018). *Anthropomorphization of artificial agents leads to fair and strategic, but not altruistic behavior.* International Journal of Human-Computer Studies.
6. **Kachergis, G.** (2018). *Word learning: Associations or hypothesis testing?* Current Biology. 28(9), R555-R557. doi: 10.1016/j.cub.2018.02.077.

7. de Kleijn, R., **Kachergis, G.**, and Hommel, B. (2018). *Predictive movements and human reinforcement learning of sequential action*. Cognitive Science. doi: 10.1111/cogs.12599.
8. **Kachergis, G.**, Rhodes, M., and Gureckis, T. (2017). *Desirable difficulties in the development of active inquiry skills*. Cognition. 166, 407–417. doi: 10.1016/j.cognition.2017.05.021.
9. **Kachergis, G.** and Yu, C. (2017). *Observing and modeling developing knowledge and uncertainty during cross-situational word learning*. IEEE Transactions on Cognitive and Developmental Systems. 10(2), 227–236. doi: 10.1109/TCDS.2017.2735540.
10. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2016). *A bootstrapping model of frequency and contextual diversity effects in word learning*. Cognitive Science. 41(3), 590–622. doi: 10.1111/cogs.12353.
11. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2014). *Cross-situational word learning is both implicit and strategic*. Frontiers in Cognitive Science. doi: 10.3389/fpsyg.2014.00588
12. **Kachergis, G.**, Wyatte, D., O'Reilly R. C., de Kleijn, R., and Hommel, B. (2014). *A continuous time neural model for sequential action*. Philosophical Transactions of the Royal Society B, 369: 20130623.
13. de Kleijn, R., **Kachergis, G.**, and Hommel, B. (2014). *Everyday robotic action: Lessons from human action control*. Frontiers in Neurorobotics. doi: 10.3389/fnbot.2014.00013
14. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2013). *Actively learning object names across ambiguous situations*. Topics in Cognitive Science, 5(1), 200–213.
15. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2012). *An Associative Model of Adaptive Inference for Learning Word-Referent Mappings*. Psychonomic Bulletin & Review, 19(2), 317–324.
16. Cox, G., **Kachergis, G.**, Recchia, G., and Jones, M. N. (2011). *Towards a scalable holographic word-form Representation*. Behavior Research Methods, 43(3), 602–615.

Refereed Conference Papers and Book Chapters

17. Long, B., *Kachergis, G.*, Agrawal, K., and Frank, M. C. (submitted). *Detecting social information in a dense database of infants' natural visual experience*.
18. de Ruiter, B. and **Kachergis, G.** (submitted). *Detecting deceptive agents in online games of Mafia*.
19. Carstensen, A., **Kachergis, G.**, Hermalin, N., and Regier, T. (2019). *"Natural concepts" revisited in the spatial-topological domain: Universal tendencies in focal spatial relations*. Proceedings of the 41st Annual Conference of the Cognitive Science Society.
20. Grimmick, C., Gureckis, T. M., and **Kachergis, G.** (2019). *Evidence of error-driven cross-situational word learning*. Proceedings of the 41st Annual Conference of the Cognitive Science Society.
21. **Kachergis, G.**, Gureckis, T. M., and Rhodes, M. (2019). *Exploring informal science interventions to promote children's understanding of natural categories*. Proceedings of the 41st Annual Conference of the Cognitive Science Society.

22. Oudeyer, P.-Y., **Kachergis, G.**, and Schueller, W. (2019). *Computational and robotic models of early language development: A review*. In Handbook on Language Development, ed. Horst, J. and von Koss Torkildsen, J. Routledge.
23. Kachergis, G. (2018.) *Leveraging adaptive games to learn how to help children learn effectively*. IEEE Cognitive and Developmental Systems (CDS) Newsletter, 15(1).
24. **Kachergis, G.**, Kielstra, J., Bokkers, L., Persad, B., and Molenaar, I. (2018). *Detecting reading strategies during task-oriented reading: Building an automated classifier*. In Workshop on Personalization Approaches in Learning Environments at AIED 2018.
25. Kottke, D., Calma, A., Huseljic, D., Sandrock, C., **Kachergis, G.**, and Sick, B. (2018). *The other human in the loop: A pilot study to find selection strategies for active learning*. 2018 International Joint Conference on Neural Networks (IJCNN).
26. de Kleijn, R., **Kachergis, G.**, and Hommel, B. (2018). *IQ and working memory predict plan-based sequential action learning*. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.
27. de Kleijn, R., **Kachergis, G.**, and Hommel, B. (2018). *Optimized behavior in a robot model of sequential action*. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.
28. Adams, K. and **Kachergis, G.** (2017). *Executive function and attention predicts preschoolers' active category learning in 1D and 2D Spaces*. *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
29. *Adams, K., ***Kachergis, G.**, and Markant, D. (2017). *Children's familiarity preference in self-directed study improves recognition memory*. *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society. *Equal contribution.
30. Hidaka, S., Torii, T., and **Kachergis, G.** (2017). *Leveraging mutual exclusivity for faster cross-situational word learning: A theoretical analysis*. *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
31. Hidaka, S., Torii, T., and **Kachergis, G.** (2017). *Quantifying the impact of active choice in word learning*. *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
32. **Kachergis, G.**, Rhodes, M., and Gureckis, T. (2016). *Desirable difficulties in the development of active inquiry skills*. *Proceedings of the 38th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
33. **Kachergis, G.**, de Kleijn, R., and Hommel, B. (2016). *A Dream Model: Reactivation and re-encoding mechanisms for sleep-dependent memory consolidation*. *Proceedings of the 38th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.

34. **Kachergis, G.**, Berends, F., de Kleijn, R., and Hommel, B. (2016). Human reinforcement learning of sequential action. *Proceedings of the 38th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
35. de Kleijn, R., **Kachergis, G.**, and Hommel, B. (2015). Robotic action control: On the crossroads of cognitive psychology and robotics. In H. Samani (Ed.), *Cognitive Robotics*. Taylor & Francis.
36. **Kachergis, G.** and Yu, C. (2014). Continuous measure of word learning supports associative model. *IEEE Conference on Development and Learning-EpiRob 2014*.
37. **Kachergis, G.**, Berends, F., de Kleijn, R. and Hommel, B. (2014). Reward effects on sequential action learning in a trajectory serial reaction time task. *IEEE Conference on Development and Learning-EpiRob 2014*.
38. **Kachergis, G.**, Berends, F., de Kleijn, R. and Hommel, B. (2014). Trajectory effects in a novel serial reaction time task. *Proceedings of the 36th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
39. **Kachergis, G.**, Yu, C. and Shiffrin, R. M. (2014). Developing semantic knowledge through cross-situational learning. *Proceedings of the 36th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
40. **Kachergis, G.**, Cox, G. E., and Shiffrin, R. M. (2013). The Effects of Repeated Sequential Context on Recognition Memory. 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.
41. **Kachergis, G.** and Yu, C. (2013). More Naturalistic Cross-situational Word Learning. 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.
42. Cox, G. E., **Kachergis, G.**, and Shiffrin, R. M. (2013). Similarity and Strategic Effects in Recognition Memory. 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.
43. Kievit-Kylar, B., Kachergis, G., and Jones, M. N. (2013). Naturalistic Word-Concept Pair Learning With Semantic Spaces. 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.
44. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2012). Cross-situational Word Learning is Better Modeled by Associations than Hypotheses. *IEEE Conference on Development and Learning-EpiRob 2012*. **Best Experiment Combined with Computational Model** .
45. **Kachergis, G.** (2012). *Learning Words with Domain-General Associative Learning Mechanisms*. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 533-538). Austin, TX: Cognitive Science Society.

46. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2012). Actively Learning Nouns Across Ambiguous Situations. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 527-532). Austin, TX: Cognitive Science Society.
Marr Prize Winner
47. Hendrickson, A. T. **Kachergis, G.**, Fausey, C., and Goldstone, R. L. (2012). Re-learning labeled categories reveals structured representations. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 1668-1673). Austin, TX: Cognitive Science Society.
48. Cox, G. E., **Kachergis, G.**, and Shiffrin, R. M. (2012). Gaussian Process Regression for Trajectory Analysis. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 1440-1445). Austin, TX: Cognitive Science Society.
49. **Kachergis, G.**, Recchia, G., and Shiffrin, R. M. (2011). Adaptive Magnitude and Valence Biases in a Dynamic Memory Task. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 819-824). Austin, TX: Cognitive Science Society.
50. **Kachergis, G.**, Cox, G. E., and Jones, M. N. (2011). OrBEAGLE: Integrating Orthography into a Holographic Model of the Lexicon. *21st Annual International Conference on Artificial Neural Networks*, Espoo, Finland. *June 2011*.
51. Trueblood, J. S., **Kachergis, G.**, and Kruschke, J. K. (2011). A Cue Imputation Bayesian Model of Information Aggregation. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 1298-1303). Austin, TX: Cognitive Science Society.
52. Gangwani, T., **Kachergis, G.**, and Yu, C. (2010). Simultaneous Cross-situational Learning of Category and Object Names. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 1595-1600). Austin, TX: Cognitive Science Society.
53. Hendrickson, A. T., **Kachergis, G.**, Gureckis, T. M., and Goldstone, R. L. (2010). Is categorical perception really verbally mediated perception? In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 1216-1221). Austin, TX: Cognitive Science Society.
54. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2010). Cross-Situational Statistical Learning: Implicit or Intentional? In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 2362-2367). Austin, TX: Cognitive Science Society.
55. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2010). Adaptive Constraints and Inference in Cross-Situational Word Learning. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 2464-2469). Austin, TX: Cognitive Science Society.

56. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2009). Frequency and Contextual Diversity Effects in Cross-Situational Word Learning. In N.A. Taatgen & H. van Rijn (Eds.), *Proceedings of the 31st Annual Conference of the Cognitive Science Society* (pp. 2220-2225). Austin, TX: Cognitive Science Society.
57. **Kachergis, G.**, Yu, C., and Shiffrin, R. M. (2009). Temporal Contiguity in Cross-Situational Statistical Learning. In N.A. Taatgen & H. van Rijn (Eds.), *Proceedings of the 31st Annual Conference of the Cognitive Science Society* (pp. 1704-1709). Austin, TX: Cognitive Science Society.
58. Barbella, D., **Kachergis, G.**, Liben-Nowell, D., Sallstrom, A., and Sowell, B. Depth of Field and Cautious-Greedy Routing in Social Networks. *18th International Symposium on Algorithms and Computation*, Sendai, Japan. 17 December 2007.

Thesis

59. Mechanisms for Cross-Situational Learning of Word-Referent Mappings: Empirical and Modeling Evidence. (winner of Glushko Prize). Ph.D. Advisory Committee: Richard M. Shiffrin, Michael N. Jones, John Kruschke, Robert Goldstone, Chen Yu. December, 2012.

Outreach

60. Kachergis, G. Leveraging Adaptive Games to Learn How to Help Children Learn Effectively. IEEE Newsletter of the Technical Committee on Cognitive and Developmental Systems. Fall 2018.
61. Kachergis, G. *The Rise-and Dangers-of Personal Digital Assistants*. Chatbots Life online publication. October 21, 2017.
62. Kachergis, G. and van Gerven, M. *De impact van neurale netwerken op taal- en spraaktechnologie*. DIXIT magazine. December, 2017.

Selected Conference Presentations

- **Kachergis, G.**, Fan, J., Haber, N., Long, B., Wong, P., Yamins, D., and Frank, M. C. (2019). *Investigating the development of exploratory play in infants and machines*. In Workshop on Guided Playful Learning at the 41st Annual Meeting of the Cognitive Science Society, Montreal, CA.
- Portelance, E., **Kachergis, G.**, and Frank, M.C. (2019). *Comparing memory-based and neural network models of early syntactic development*. Poster presented at the Boston University Conference on Language Development, Boston, MA.
- Adams, K., **Kachergis, G.**, and Goulart de Lucena, H. (2018). *A Suite of Adaptive Games for Self-directed Literacy and Numeracy Education*. Poster presented at the 40th Annual Meeting of the Cognitive Science Society, Madison, WI.

- **Kachergis, G.**, Tubridy, S., and Gureckis, T. (2016). *Predictable stimulus onsets improve memory*. Poster presented at the 38th Annual Meeting of the Cognitive Science Society, Philadelphia, PA.
- **Kachergis, G.**, Rhodes, M., and Gureckis, T. (2015). Understanding developmental bottlenecks in active inquiry. Poster presented at the Annual Meeting of the Cognitive Development Society. Columbus, OH. *October 2015*.
- **Kachergis, G.**, Rhodes, M., and Gureckis, T. (2015). *Understanding Developmental Bottlenecks in Active Inquiry*. Poster presented at the 37th Annual Meeting of the Cognitive Science Society, Pasadena, CA. *July 2015*.
- **Kachergis, G.**, de Kleijn, R., and Hommel, B. (2015). Should androids dream of electric sheep? Mechanisms for sleep-dependent memory consolidation. *International Conference on Cognitive Modeling*. *April 2015*.
- **Kachergis, G.**, de Kleijn, R., and Hommel, B. *A Spiking Neural Model for Sequential Action Control*. 14th Annual Summer Interdisciplinary Conference, Cortina, Italy. *26 July 2013*.
- **Kachergis, G.** and Hidaka, S. *Towards a Cognitive Bayesian Model of Word Learning*. 46th Annual Meeting of the Society for Mathematical Psychology, Berlin, Germany. *August 7, 2013*.
- Cox, G. E., **Kachergis, G.** and Shiffrin, R. M. *Perceptual Similarity, Encoding Strategy, and Decision Dynamics in Recognition Memory*. 46th Annual Meeting of the Society for Mathematical Psychology, Berlin, Germany. *August 6, 2013*.
- Brown, S., **Kachergis, G.**, Donkin, C., Heathcote, A., Rae, B. *How do people make fast decisions?*. 45th Annual Meeting of the Society for Mathematical Psychology, Columbus, OH. *July 21, 2012*.
Kachergis, G. (2012). *Learning Words with Domain-General Associative Learning Mechanisms*. 34th Annual Meeting of the Cognitive Science Society, Sapporo, Japan. *August 2012*.
Kachergis, G., Yu, C., and Shiffrin, R. M. (2012). *Actively Learning Nouns Across Ambiguous Situations*. 34th Annual Meeting of the Cognitive Science Society, Sapporo, Japan. *August 2012*.
- **Kachergis, G.**, Cox, G. E., Shiffrin, R. M. *Dynamic Effects of Perceptual and Categorical Similarity on Recognition Memory*. Poster presented at the Context and Episodic Memory Symposium, Bloomington, IN. *May 10, 2012*.
- **Kachergis, G.**, Yu, C., Shiffrin, R. M. *Modeling Cross-situational Word Learning: Hypotheses or Associations?*. Midwest Cognitive Science Conference, Bloomington, IN. *May 7, 2012*.
- **Kachergis, G.**, Yu, C., Shiffrin, R. M. *Active Cross-situational Statistical Word Learning*. Poster presented at the 33rd Annual Meeting of the Cognitive Science Society, Boston, MA. *July 2011*.
- **Kachergis, G.**, Yu, C., Shiffrin, R. M. *An Associative Model of Inference in Statistical Word Learning*. 44th Annual Meeting of the Society for Mathematical Psychology, Boston, MA. *July 2011*.
- **Kachergis, G.**, Yu, C., Shiffrin, R. M. *Modeling the Acquisition of the Mental Lexicon*. 43rd Annual Meeting of the Society for Mathematical Psychology, Portland, OR. *August 2010*.

- **Kachergis, G.**, Yu, C., Shiffrin, R. M. *Modeling Frequency and Context Effects in Statistical Word Learning*. 42nd Annual Meeting of the Society for Mathematical Psychology, Amsterdam, the Netherlands. *August 2009*.
- Gangwani, T., **Kachergis, G.**, Yu, C. *Simultaneous Noun and Category Learning via Cross-Situational Statistics*. 31st Annual Meeting of the Cognitive Science Society, Amsterdam, the Netherlands. *July 2009*.
- **Kachergis, G.**, Yu, C., Shiffrin, R. M. *The Semantics of Eye Movements in Cross-Situational Statistical Word Learning*. 41st Annual Meeting of the Society for Mathematical Psychology, Washington, D.C. *27 July 2008*.
- **Kachergis, G.**, Yu, C., Shiffrin, R. M. *Temporal Continuity in Cross-Situational Statistical Learning*. 30th Annual Meeting of the Cognitive Science Society, Washington, D.C. *25 July 2008*.
- **Kachergis, G.**, Yu, C., Shiffrin, R. M. *The Automaticity of Statistical Word Learning*. 30th Annual Meeting of the Cognitive Science Society, Washington, D.C. *25 July 2008*.
- **Kachergis, G.**, Shiffrin, R. M. *The Effects of Repeated Sequential Context on Recognition*. 7th Annual Summer Interdisciplinary Conference, Madonna di Campiglio, Italy. *10 July 2008*.
- **Kachergis, G.**, Yu, C., Shiffrin, R. M. *The Automaticity of Cross-Situational Statistical Learning*. Redhawk Mental Life, Oxford, OH. *8 March 2008*.
- Ohnesorge, C., **Kachergis, G.** *Testing the Whorfian Hypothesis: Lateralized Presentation and Color Recognition*. 48th Annual Meeting of the Psychonomic Society, Long Beach, CA. *17 November 2007*.
- Ohnesorge, C., Fanta, A., **Kachergis, G.** *Color Recognition and Laterality: Does Language Affect Color Processing?* 6th Annual Summer Interdisciplinary Conference, Kalymnos, Greece. *28 June 2007*.
- **Kachergis, G.**, Olson, J. F. *Lexical Variety in Human Processing of Syntactically Ambiguous Sentences*. Minnesota Undergraduate Psychology Conference, University of St. Thomas, St. Paul, MN. *22 April 2006*.

Teaching, Supervision, and Departmental Service

- Donders Education Hackathon - helped organize, and mentored 3rd place team, *Fall 2017*
- Machine Learning - lectured reinforcement learning unit for AI Bachelor's course, *Spring 2018*
- Cognitive Robotics - lectured and developed labs for AI Bachelor's course (6EC), *Fall 2017*
- Cognitive Computational Modeling of Language and Web - developed and taught AI Master's course (6EC), *Spring 2017, 2018*
- Contributor to Trends in Artificial Intelligence Master's course, *Fall 2016, 2017*
- Contributor to Search, Planning, and Machine Learning AI Bachelor's course, *Spring 2018*

- Supervised Doctoral students: Roy de Kleijn *co-promoter 2013–2017*
- Supervised AI Master’s theses: Floris Berends *2014*; Diede Kemper, Roos van der Donk, Chris Wolk *2016–2017*; Joshua van Kleef, Jordi Riemens *2017–2018*;
- Supervised AI Bachelor’s theses:
Spring 2017 - Abdullahi Ali, Berend van Deelen, Hester Huijsdens, Jake Overbeek, Ylja Remmits, Vivian Vriezেকolk, Maran Koolen, Bob de Ruiter, Jelmer Jansen, Marlen Lorenz
Fall 2017 - Max de Grauw, Tristan Payer, Frans van Grunsven, Jetske Adams, Wieke Harmsen, Stef Brands, Thomas Zoeter, Ruby van Rossum, Ismail Guclu, Bob de Ruiter, Michel Meijerman
Spring 2018 - Tessa Bal, Chrisovalandis Boukouras, Ismail Guclu, Tjeerd Mooi, Juliana Montana Melgarejo, Luke Peters, Kimberly Stoutjesdijk
- Member of A.I. Master’s Degree Program Committee, Radboud University, *Fall 2016–Spring 2017*
- Member of A.I. Master’s Exam Board Committee, Radboud University, *Fall 2017–present*
- Coordinator of Radboud University’s A.I. Master’s track on Web and Language, *Fall 2016–present*
- Coordinator for Radboud University’s Good Aftersnoon talk series, *Fall 2016–present*
- Coordinator for NYU’s Concepts and Categories (ConCats) talk series, *2015–2016*
- *Cognitive Modeling to Study Language and Improve Education*, guest lecture in Topics of AI course at Radboud University, *Fall 2016*
- *Inverting the Classroom*, Pedagogy Seminar Talk, Indiana University, *Spring 2012*
- Teaching Assistant for Human Learning and Cognition, *Spring 2012*
- *Categorization*, guest lecture in Intro. to Psychology, Instr. Hilary Kalagher, *Spring 2009*
- Coordinator for Indiana University Cognitive Lunch talk series, *Fall 2010 to Fall 2011*
- Instructor for Experimental Methods in Psychology (P211), Indiana University, *Spring 2010*
- Grader for Artificial Intelligence, Prof. David Musicant, Carleton College, *Winter 2007*
- Prefect for Data Structures, Prof. David Liben-Nowell, Carleton College, *Winter 2006*
- Supervised undergraduate research assistants: J. Booher, E. Farmer, T. Gangwani, Z. Horwitz, K. Mullen, E. Lee, P. LaFree, A. Salisbury, B. Jenkins

Invited Talks

- *Engineering the statistics of the environment: How people shape their experience to promote learning*, developmental brown bag at Stanford University, *November 28, 2018*
- *Engineering the statistics of the environment: How people shape their experience to promote learning*, colloquium at Tsinghua University, Beijing, *September 17, 2018*

- *Engineering the statistics of the environment: How people shape their experience to promote learning*, Radboud University, April 29, 2018
- *Engineering the statistics of the environment: How people shape their experience to promote learning*, UC Merced, February 14, 2018
- *Learning More with Less Input: Lessons from Children and Education for A.I.*, colloquium at INRIA Flowers Lab, Bordeaux, November 17, 2017
- *Learning More with Less Input: Lessons from Children and Education for A.I.*, TiCC colloquium at Tilburg University, November 8, 2017
- *Learning More with Less Input: Lessons from Children and Education for A.I.*, AI colloquium at Radboud University, November 2, 2017
- *From Active Learning in Humans to Adaptive Machines in Education*, Summerschool on Learning Systems / Biocomputing at Otto von Guericke University Magdeburg, August, 2017
- *Adaptive Educational Apps for Self-taught Literacy and Numeracy*, Annual CognAC AI Symposium, May, 2017
- *Adaptive Educational Apps for Self-taught Literacy and Numeracy*, AI colloquium at Radboud University, December, 2016
- *A Model with Memory- and Uncertainty-guided Attention to Learn Nouns—and more!*, Radboud University, May 3, 2016
- *How People Learn: Memory- and Uncertainty-driven Attention*, Brown University, April 8, 2016
- *How People Learn Nouns: Memory- and Uncertainty-driven Attention*, University of North Carolina, Charlotte, February 29, 2016
- *How People Learn Nouns (and more)*, Syracuse University, December 3, 2015
- *How People Learn Nouns*, New York University, April 24, 2015
- *Word Learning Trajectories on Different Timescales*, University of Groningen, November 25, 2014
- *Word Learning Trajectories on Different Timescales*, University of Edinburgh, July 2, 2014
- *Word Learning Trajectories on Different Timescales*, Stanford University, May 20, 2014
- *How People Learn Words: Modeling Semantic Bootstrapping and Frequency Effects*, Swansea University, April 2, 2014
- *Similarity and Strategic Effects in Recognition Memory: Attack of the Blobs!*, Indiana University, October 9, 2013
- *Explaining Word Learning Using Domain-General Mechanisms*, University of Colorado at Boulder, September 30, 2013

- *Domain-General Mechanisms for Learning Word-Referent Mappings*, Leiden University, *October 10, 2012*
- *Domain-General Mechanisms for Learning Word-Referent Mappings*, Japan Advanced Institute for Science and Technology, *June 27, 2012*
- *How Children Learn Words*, Carleton College, *April 25, 2012*
- *Domain-General Mechanisms for Learning Word-Referent Mappings*, Syracuse University, *April 15, 2012*
- *Dynamic Effects of Perceptual and Categorical Similarity on Recognition Memory*, Syracuse University, *April 15, 2012*
- *Domain-General Mechanisms for Learning Word-Referent Mappings: Empirical and Modeling Evidence*, Cognitive Lunch, Indiana University, *April 4, 2012*
- *Actively Learning Nouns Across Ambiguous Situations Using Associative Mechanisms*, Stanford University, *February 21, 2012*
- *Modeling the Acquisition of the Mental Lexicon*, Cognitive Lunch, Indiana University, *April 28, 2010*

Membership and Professional Service

- **Associate Editor**, *Frontiers in Psychology: Cognition*, *July 2016–Present*
- **Ad hoc reviewer**: *Cognition*; *Current Biology*; *Memory & Cognition*; *Psychological Review*; *Applied Psycholinguistics*; *Behavior Research Methods*; *Cognitive Science Journal*; *Cognitive Science Conference*; *Data Mining and Knowledge Discovery*; *Infant Behavior and Development*; *Journal of Mathematical Psychology*; *Journal of Speech, Language, and Hearing Research*; *Journal of Experimental Psychology: Learning, Memory, and Cognition*; *Frontiers in Behavioral Neuroscience*; *Language Learning*; *Learning and Individual Differences*; *NeuroImage*; *PLOS ONE*; *IEEE Transactions on Cognitive and Developmental Systems*; *IEEE Conference on Development and Learning (ICDL-EpiRob)*
- **Member** of Cognitive Science Society, *2005–Present*
- **Member** of The Society for Mathematical Psychology, *2008–Present*

Last updated: February 29, 2020