# **Kenneth Tyler Wilcox**

Education	
University of Notre Dame, Notre Dame, IN	
Ph.D. Quantitative Psychology 2022 (ex	(pected)
Rochester Institute of Technology, Rochester, NY	
M.S. Applied Statistics	2017
Thesis: Bayesian hidden topic Markov models	
B.S. Psychology	2013
Employment	
Soleo Communications, Data Scientist	2016
Grants and Awards	
University of Notre Dame 2017-	-present
University Presidential Fellowship	
Upstate Chapters of the American Statistical Association	2016
Honorable Mention for Oral Presentation Based on Methodology and Theor	ry
Rochester Institute of Technology Center for Quality and Applied Statistics	2015
John D. and Rachel E. Hromi Endowed Scholarship	
Association for Psychological Science Student Caucus	2014
Travel Assistance Award (\$200)	
Rochester Institute of Technology College of Liberal Arts	
Outstanding Undergraduate Scholarship Award	2013
Student Research Fund (\$72)	2013
Kearse Award for Excellence in Writing	2012

# **Teaching Experience**

University of Notre Dame

Teaching Assistant, Department of Psychology

08/2019-12/2019

Courses: Quantitative Methods I (graduate course)

Rochester Institute of Technology

Teaching Assistant, School of Mathematical Sciences

08/2016-05/2017

Courses: Elements of Statistical Theory (graduate course), Principles of Statistical Data Mining (graduate course)

Recitation Instructor, School of Mathematical Sciences

08/2016-12/2016

Course: Elements of Statistical Theory (graduate course)

**Tutor**, Academic Support Center

09/2010-05/2013, 10/2014-05/2017

Courses: Calculus, Multivariate Calculus, Linear Algebra, Differential Equations, University Physics, Probability, Statistics, Regression Analysis, Design of Experiments, Stochastic Processes

Recitation Instructor, School of Mathematical Sciences

09/2015-12/2015

Course: Elements of Statistical Theory (graduate course)

Teaching Assistant, Center for Quality and Applied Statistics

01/2015-12/2015

Courses: Statistical Software (graduate course), Probability and Statistics II for Engineers

Instructor, Academic Support Center

10/2014-12/2015

Course: Critical Mathematical Skills

**Tutor**, Arthur O. Eve Higher Education Opportunity Program

07/2012-08/2012

Courses: Pre-Calculus, Algebra

# Research Experience

Rochester Institute of Technology, Rochester, NY

Statistician, Department of Psychology

02/2016-present

Research collaborator: Caroline M. DeLong

Statistician, Department of Service Systems

05/2017-07/2017

Research collaborators: Malarvizhi Hirudayaraj, Martin Anselm

Research Assistant, Department of Psychology

03/2012-05/2013

Research adviser: Caroline M. DeLong

Research Assistant, Department of Psychology

11/2011-05/2013

Research adviser: John Edlund

SUNY Upstate Medical University, Syracuse, NY

Research Analyst, Department of Psychiatry and Behavioral Sciences 06/2013-08/2013

Research adviser: John Manring

Research Intern, Department of Neurosurgery

07/2011-09/2011

Research advisers: John Manring, Satish Krishnamurthy

# **Publications**

Journal Articles

- DeLong, C. M., Wright, C., Fobe, I., **Wilcox, K. T.**, & Morrison, E. (2019). North American river otters (*Lontra canadensis*) discriminate between 2D objects varying in shape and color. *Learning & Behavior*, 47(1), 91-104. https://doi.org/10.3758/s13420-018-0346-x
- DeLong, C. M., Fobe, I., O'Leary, T., & **Wilcox, K. T.** (2018). Visual perception of planar-rotated 2D objects in goldfish (*Carassius auratus*). *Behavioural Processes*, 157, 263-278. https://doi.org/10.1016/j.beproc.2018.10.009
- DeLong, C. M., Keller, A. M., **Wilcox, K. T.**, Fobe, I., & Keenan, S. A. (2018). Visual discrimination for geometric and complex 2D shapes in goldfish (*Carassius auratus*). *Animal Behavior and Cognition*, 5(3), 300-319. https://doi.org/10.26451/abc.05.03.05. 2018
- DeLong, C. M., Barbato, S., O'Leary, T., & Wilcox, K. T. (2017). Small and large number discrimination in goldfish (*Carassius auratus*) with extensive training. *Behavioural Processes*, 141(P2), 172-183. https://doi.org/10.1016/j.beproc.2016.11.011
- Edlund, J.E., Nichols, A. L., Okdie, B. M., Guadagno, R. E., Eno, C. A., Heider, J. D., Hansen, E., Sagarin, B. J., Blackhart, G., Cottrell, C. A., & Wilcox, K. T. (2014). The prevalence and prevention of crosstalk: A multi-institutional study. *The Journal of Social Psychology*, 154(3), 181-185. https://doi.org/10.1080/00224545.2013.872596

# Conference Proceedings

Fobe, I., DeLong, C. M., & **Wilcox, K. T.** (2017). An exploration of rhythm perception in African penguins (*Spheniscus demersus*). *Proceedings of Meetings on Acoustics*, 31(1). https://doi.org/10.1121/2.0000773

Manuscripts Under Review

- **Wilcox, K. T.** & Wang, L. Integrative data analysis using multilevel modeling: Why, how, and when. Manuscript submitted for publication.
- DeLong, C. M., Fellner, W., Wilcox, K. T., Odell, K., & Harley, H. E. Visual perception in bottlenose dolphins: Successful recognition of 2D objects rotated in the picture and depth planes. Manuscript submitted for publication.

Manuscripts in Preparation

- **Wilcox, K. T.**, Jacobucci, R., McCloskey, M. A., & Ammerman, B. A. A topic mining approach to characterizing interpersonal stress among nonsuicidal self-injury. Manuscript in preparation.
- **Wilcox, K. T.**, Jacobucci, R., & Zhang, Z. Supervised latent Dirichlet allocation with covariates: A Bayesian joint regression model of text and covariates. Manuscript in preparation.
- Jacobucci, R., Ammerman, B., & Wilcox, K. T. The application of machine learning for text-based responses to improve suicide risk prediction. *Suicide and Life Threatening Behavior*. Manuscript in preparation; invited for special issue.
- **Wilcox, K. T.** & Fokoué, E. P. A Bayesian hidden topic Markov model for latent linguistic structure. Manuscript in preparation.

# **Software Development**

**Wilcox, K. T.** (2019). Psychtm: Text mining for psychological research (Version 2019.7) [Computer software]. Available at https://github.com/ktw5691/psychtm/

#### **Presentations**

**Invited Seminars** 

Peer-Reviewed Conference Presentations

- Wilcox, K. T. (2019, October). Bayesian supervised topic modeling with covariates. Poster submitted for presentation at the 17th Annual Society of Multivariate Experimental Psychology Graduate Student Conference, Baltimore, Maryland.
- Wilcox, K. T., Jacobucci, R., McCloskey, M. S., & Ammerman, B. A. (2019, November). Evaluating personal narratives of interpersonal relationships via text mining to predict nonsuicidal self-injury. Paper accepted for presentation at the 53rd Annual Convention for the Association for Behavioral and Cognitive Therapies, Atlanta, Georgia.
- Ammerman, B. A., **Wilcox, K. T.**, & Jacobucci, R. (2019, November). A nuanced examination of the relationship between social connectedness and suicidal ideation. Paper accepted for presentation at the 53rd Annual Convention for the Association for Behavioral and Cognitive Therapies, Atlanta, Georgia.
- DeLong, C. M., Morrison, E., Wegman, J., Rachfal, T., & Wilcox, K. T. (2019, April). Visual perception of rotated 2D color representations of familiar 3D objects in goldfish (*Carassius auratus*). Paper presented at the 26th Annual International Conference on Comparative Cognition, Melbourne, FL.
- Wilcox, K. T. (2018, July). A Bayesian hidden topic Markov model for latent linguistic structure. Paper presented at the 2018 International Meeting of the Psychometric Society, New York City, New York.

- DeLong, C. M., Gardner, K., Rachfal, H., Morrison, E., & Wilcox, K. T. (2018, April). Visual discrimination of rotated 3D objects in goldfish (*Carassius auratus*). Paper presented at the 25th Annual International Conference on Comparative Cognition, Melbourne Beach, Florida.
- Morrison, E., DeLong, C. M., Wright, C., Gardner, K., Rachfal, H., Gamble, M., Wilcox, K. T., Frye, D., Thorner, H., Fobe, I., & Dami, J. (2018, April). North American river otters (*Lontra canadensis*) use shape and color to discriminate between 2D objects. Poster presented at the 25th Annual International Conference on Comparative Cognition, Melbourne Beach, Florida.
- Fobe, I., DeLong, C. M., & Wilcox, K. T. (2017, December). An exploration of rhythm perception in African penguins (*Spheniscus demersus*). Paper presented at the 174th Meeting of the Acoustical Society of America, New Orleans, Louisiana.
- DeLong, C. M., Fellner, W., Harley, H. E., Fobe, I., Wilcox, K. T., Gardner, K., & Odell. K. (2017, November). Visual discrimination of rotated 2D objects in a bottlenose dolphin (*Tursiops truncatus*) and goldfish (*Carassius auratus*). Paper presented at the Fall Meeting of the Comparative Cognition Society, Vancouver, British Columbia, Canada.
- **Wilcox, K. T.** (2017, April). Text mining with a Bayesian hidden topic Markov model. Paper presented at the Sixth Annual Joint Conference of the Upstate Chapters of the American Statistical Association, Buffalo, NY.
- DeLong, C. M., Fobe, I., **Wilcox, K. T.**, & O'Leary, T. (2017, April). Visual discrimination of rotated 2D objects in goldfish (*Carassius auratus*). Paper presented at the 24th Annual International Conference on Comparative Cognition, Melbourne, FL.
- **Wilcox, K. T.** (2016, April). An introduction to ensemble methods for machine learning. Talk presented at the Fifth Annual Joint Conference of the Upstate Chapters of the American Statistical Association, Buffalo, NY.
- Wilcox, K. T., & DeLong, C. M. (2014, May). Mindfulness meditation and relaxation differentially improve mindfulness and affect, not emotional memory. Poster presented at the 26th Association for Psychological Science Annual Convention, San Francisco, CA.
- Nichols, A. L., Edlund, J. E., Okdie, B. M., Guadagno, R. E., Eno, C. A., Heider, J. D., Hansen, E., Sagarin, B. J., Blackhart, G., Cottrell, C. A., & Wilcox, K. T. (2013, November). Predicting and preventing participant crosstalk: A multi-institutional investigation. Paper presented at the Second International Conference on Emerging Research Paradigms in Business and Social Sciences, Dubai, UAE.

#### Student Symposium Presentations

**Wilcox, K. T.**, Wright, C., & DeLong, C. M. (2012, August). Training North American river otters (*Lontra canadensis*) to discriminate among objects. Poster presented at the RIT Undergraduate Research and Innovation Symposium, Rochester, NY.

## **Institute Service**

University of Notre Dame

# **Department of Psychology**

o8/2018-present

Quantitative Area Representative, Graduate Advisory Committee

Rochester Institute of Technology

# **Department of Applied Statistics**

01/2015-05/2017

Secretary, Data Science Research Group

# Summer Mathematics Institute (Rochester, NY)

06/2016

Panel member for a panel discussion titled "On the Five Pillars of Statistical Science: Methodology, Theory, Computation, Applications and Data"

# **Psychology Department**

03/2012-05/2013

Secretary, Psychology Student Society

# **College of Liberal Arts**

09/2012-05/2013

Student Representative, Eisenhart Nomination Committee

# First Year Enrichment Program

09/2010-05/2013

**Peer Mentor** 

#### Professional Associations

American Psychological Association

American Psychological Association Division 5

American Statistical Association

Association for Psychological Science

**Institute of Mathematical Statistics** 

**Psychometric Society** 

### **Professional Activities**

Association for Psychological Science

#### **Association for Psychological Science Student Caucus**

12/2016, 12/2017, 12/2018

Reviewer, APSSC Student Grant Competition

Upstate Chapters of the American Statistical Association

#### Sixth Annual Joint Conference (Buffalo, NY)

04/2017

Chair for a session titled "Applications of Statistics in Environmental Studies"

# Judge for the 2017 Pre-College Statistical Data Analysis Competition Fifth Annual Joint Conference (Buffalo, NY)

04/2016

Judge for the 2016 Pre-College Statistical Data Analysis Competition