# **Kenneth Tyler Wilcox**

Education		
University of Notre Dame, Notre Dame, IN		
Ph.D. Quantitative Psychology expected of	5/2022	
Rochester Institute of Technology, Rochester, NY		
M.S. Applied Statistics	2017	
Thesis: Bayesian hidden topic Markov models		
B.S. Psychology	2013	
Grants and Awards		
University of Notre Dame 2017-	2017–present	
University Presidential Fellowship		
Upstate Chapters of the American Statistical Association	2016	
Honorable Mention for Oral Presentation Based on Methodology and Theor	y	
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	
Touching Experience		

## **Teaching Experience**

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

# **Employment**

Soleo Communications, Data Scientist

01/2016-08/2016

#### **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.

#### 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 2019.2) [Computer software]. Available at https://github.com/ktw5691/psychtm/

#### **Presentations**

**Invited Seminars** 

Peer-Reviewed Conference Presentations

- Wilcox, K. T., Jacobucci, R., McCloskey, M. S., & Ammerman, B. A. (2019, March). Evaluating personal narratives of interpersonal relationships via text mining to predict nonsuicidal self-injury. Paper submitted 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, March). A nuanced examination of the relationship between social connectedness and suicidal ideation. Paper submitted 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

08/2018-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