# **Kenneth Tyler Wilcox**

Graduate Teaching Assistant, University of Notre Dame 390 Corbett Family Hall  $\cdot$  Department of Psychology  $\cdot$  Notre Dame, IN 46556 *Updated:* February 1, 2020

Education	
University of Notre Dame, Notre Dame, IN	
Ph.D. Quantitative Psychology	22 (expected)
Rochester Institute of Technology, Rochester, NY	
M.S. Applied Statistics	2017
Thesis: Bayesian hidden topic Markov models	
B.S. Psychology	2013
Grants and Awards	
Society of Multivariate and Experimental Psychology	2019
Travel Assistance Award (\$1,500)	
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	Theory
Rochester Institute of Technology Center for Quality and Applied Statist	tics 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 (\$100)	2012
Teaching Experience	
University of Notre Dame	
Teaching Assistant & Lab Instructor, Department of Psychology	08/2019-

08/2019-

Courses: Quantitative Methods I (graduate course), Quantitative Methods II (graduate course)

Rochester Institute of Technology

**Teaching Assistant**, School of Mathematical Sciences

09/2015-05/2017

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

**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 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., Fellner, W., **Wilcox, K. T.**, Odell, K., & Harley, H. E. (2019). Visual perception in bottlenose dolphins: Successful recognition of 2D objects rotated in the picture and depth planes. *Journal of Comparative Psychology*. https://doi.org/10.1037/com0000207
- Wilcox, K. T., Jacobucci, R., & Zhang, Z. (2019). Bayesian supervised topic modeling with covariates. *Multivariate Behavioral Research* (Abstract). https://doi.org/10.1080/00273171.2019.1695568
- 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

Ammerman, B. A., **Wilcox, K. T.**, O'Loughlin, C. M., & McCloskey, M. S. (Under review). Characterizing the choice to disclose nonsuicidal self-injury. *Journal of Clinical Psychology*.

2016

- Jacobucci, R., Ammerman, B. A., & Wilcox, K. T. (Under review). The use of text-based responses to improve our understanding and prediction of suicide risk. *Suicide and Life-Threatening Behavior*.
- Morrison, E. K., DeLong, C. M., & Wilcox, K. T. (Under review). Humans discriminate among bottlenose dolphin signature whistles masked by noise: Investigating perceptual strategies for anthropogenic noise pollution. *Journal of the Acoustical Society of America*.

#### Manuscripts in Preparation

- Che, C., Wilcox, K. T., Zhang, Z. Data requirements for latent Dirichlet allocation. Manuscript 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.
- Wilcox, K. T. & Wang, L. Integrative data analysis using multilevel modeling: Why, how, and when. Manuscript in preparation.

# **Software Development**

**Wilcox, K. T.** (2020). Psychtm: Text mining for psychological research (Version 2020.2) [Computer software]. Available at https://github.com/ktw5691/psychtm/

#### **Presentations**

Peer-Reviewed Conference Presentations

- **Wilcox, K. T.**, Jacobucci, R., Zhang, Z. (2020, May). Modeling relationships from themes in text and covariates with an outcome: A Bayesian supervised topic model with covariates. Paper submitted for presentation at the Annual Meeting of the International Society for Data Science and Analytics, Notre Dame, Indiana.
- DeLong, C. M., Morrison, E., Wegman, J., Morelli, J., Rachfal, T., & Wilcox, K. T.. (2020, April). Visual object categorization in goldfish (*Carassius auratus*). Poster accepted for presentation at the 27th Annual International Conference on Comparative Cognition, Melbourne, Florida.
- Ammerman, B. A., **Wilcox, K. T.**, & Jacobucci, R. (2019, November). A nuanced examination of the relationship between social connectedness and suicidal ideation. Paper presented at the 53rd Annual Convention for the Association for Behavioral and Cognitive Therapies, Atlanta, Georgia.
- 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 presented at the 53rd Annual Convention for the Association for Behavioral and Cognitive Therapies, Atlanta, Georgia.
- **Wilcox, K. T.** (2019, October). Bayesian supervised topic modeling with covariates. Poster presented at the 17th Annual Society of Multivariate Experimental Psychology Graduate Student Conference, Baltimore, Maryland.
- 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, Florida.
- 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, Florida.
- **Wilcox, K. T.** (2016, April). An introduction to ensemble methods for machine learning. Paper presented at the Fifth Annual Joint Conference of the Upstate Chapters of the American Statistical Association, Buffalo, New York.
- Wilcox, K. T., & DeLong, C. M. (2014, May). Mindfulness meditation and relaxation dif-

ferentially improve mindfulness and affect, not emotional memory. Poster presented at the 26th Association for Psychological Science Annual Convention, San Francisco, California.

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, United Arab Emirates.

**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, New York.

#### **Institute Service**

*University of Notre Dame* 

## **Department of Psychology**

08/2018-07/2019

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

Discussant, "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

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

Session chair, "Applications of Statistics in Environmental Studies"

Judge, 2017 Pre-College Statistical Data Analysis Competition

Fifth Annual Joint Conference (Buffalo, NY)

04/2016

Judge, 2016 Pre-College Statistical Data Analysis Competition