# **Kenneth Tyler Wilcox**

| Education   |               |
|---|---------------|
| University of Notre Dame, Notre Dame, IN                                |               |
| Ph.D. Quantitative Psychology 20  | 22 (expected) |
| 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        | Theory        |
| Rochester Institute of Technology Center for Quality and Applied Statis | 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                                  | 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., 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.
- 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.
- 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