

# CURRICULUM VITAE

Trisha Van Zandt

January 2018

## CONTACT INFORMATION

Department of Psychology  
The Ohio State University  
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Department: (614) 292 - 8185

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## EDUCATION

1992 Purdue University, Ph.D., Quantitative Psychology

1988 Purdue University, M.S., Quantitative Psychology

1985 Purdue University, B.A., Psychology

## RESEARCH SPECIALIZATION

Quantitative methods

Cognitive modeling of memory, judgment and decision making

## PROFESSIONAL EXPERIENCE

2014 - present	Professor, Ohio State University, Department of Psychology
2010 - present	Professor, Ohio State University, Department of Statistics (courtesy appointment)
2000 - 2014	Associate Professor, Ohio State University, Department of Psychology
1994 - 2000	Assistant, Associate Professor, The Johns Hopkins University, Department of Psychology
1992 - 1994	Postdoctoral research fellow, Northwestern University (supported by the National Institutes of Mental Health)

## HONORS

2014	Fred Brown Research Award, Department of Psychology, The Ohio State University
2006	Distinguished Teaching Award, Department of Psychology, The Ohio State University
1997	Presidential Early Career Award for Scientists and Engineers
1997	Junior Scholar, Workshop for Junior Mathematical Behavioral Scientists, University of California at Irvine

## GRANTS AND FELLOWSHIPS

- 2014-2017 NSF Award, “Modeling the good, the bad, and the ugly: Moving beyond data preprocessing in human performance,” for \$350,000 (with Mario Peruggia and Peter Craigmile)
- 2010-2013 NSF Award, “Modeling Trends, Dependence and Tail Structure in Sequential Response Time Data,” for \$380,000 (with Mario Peruggia and Peter Craigmile)
- 2008-2009 NSF Award, “Temporal Context and Rhythmic Effects on Simple Choice,” for \$137,005 (with Mari R. Jones)
- 2008 NSF Award, Funding for the 2008 meeting of the Society for Mathematical Psychology for \$10,000 (T. Van Zandt, author and PI)
- 2008 AFOSR Award, Funding for the 2008 meeting of the Society for Mathematical Psychology for \$10,000 (authored by T. Van Zandt, Michael Dougherty, PI)
- 2007 AFOSR Award, Funding for the 2007 meeting of the Society for Mathematical Psychology for \$10,000 (authored by Richard Golden, T. Van Zandt, PI)
- 2004-2008 NSF Award, “Hierarchical Bayesian Methods in Psychology of Consumer Behavior,” for \$609,100 (with Angela Dean, Greg Allenby, Mario Peruggia, Steve MacEachern, Michael Browne and Thomas Otter)
- 2002-2004 NSF Award, “Bayesian Analysis of Chronometric Data,” for \$210,000 (with Mario Peruggia)
- 2001-2000 Seed Grant Award, The Ohio State University, “Response Reversals in Recognition Memory,” for \$20,000
- 1998-1999 Technology Fellows Program, The Johns Hopkins University, “Laboratory Experience in Psychology,” for \$5000
- 1997-2002 NSF CAREER Award, “Information Processing Models of Memory Retrieval and Response Priming,” for \$500,000
- 1995 Kenan Grant, The Johns Hopkins University, for \$2895
- 1990 Summer David Ross Fellowship, Purdue University, for \$1400

## JOURNAL ARTICLES

- 31. Benjamin, D.J., Berger, J.O., Johannesson, M., Nosek, B.A., Wagenmakers, E.-J., *et int.* [including **Van Zandt, T.**], & Johnson, V.E. (2017). Redefine statistical significance. *Nature Human Behaviour*, **1**, 0189.
- 30. Kim, S., Potter, K., Craigmile, P. F., Peruggia, M., & **Van Zandt, T.** (2017). A Bayesian race model for recognition memory. *Journal of the American Statistical Association*, **112**, 77-91.
- 29. Hout J.W., MacEachern, S.N., Peruggia, M., Townsend, J.T., & **Van Zandt, T.** (2016). Semiparametric Bayesian approaches to systems factorial technology [Special issue]. *Journal of Mathematical Psychology*, **75**, 68-85.
- 28. Rodriguez, C.A., Turner, B.M., **Van Zandt, T.**, McClure, S.M. (2015). The neural basis of value accumulation in intertemporal choice. *European Journal of Neuroscience*, **42**, 2179-2189.
- 27. Logan, G.D., **Van Zandt, T.**, Verbruggen, F. & Wagenmakers, E.-J. (2014). On the ability to inhibit thought and action: General and special theories of

- an act of control. *Psychological Review*, **121**, 66-95.
26. Turner, B.M. & **Van Zandt, T.** (2014). Hierarchical approximate Bayesian computation. *Psychometrika*, **79**, 185-209.
  25. Turner, B.M., Dennis, S. & **Van Zandt, T.** (2013). Likelihood-free Bayesian analysis of memory models. *Psychological Review*, **120**, 667-678.
  24. Turner, B.M. & **Van Zandt, T.** (2012). A tutorial on Approximate Bayesian Computation. *Journal of Mathematical Psychology*, **56**, 69-85.
  23. Turner, B.M., **Van Zandt, T.** & Brown, S. (2011). A dynamic, stimulus-driven model of signal detection. *Psychological Review*, **118**, 583-613.
  22. Craigmile, P.F., Peruggia, M., & **Van Zandt, T.** (2010). Hierarchical Bayes models for response time data. *Psychometrika*, **75**, 613-632.
  21. Merkle, E.C., **Van Zandt, T.** & Sieck, W. (2008). Rejoinder: Error in confidence judgments. *Journal of Behavioral Decision Making*, **21**, 453-456
  20. Merkle, E.C., Sieck, W.R., & **Van Zandt, T.** (2008). Response error and processing biases in confidence judgment. *Journal of Behavioral Decision Making*, **21**, 428-448.
  19. Otter, T., Allenby, G.M., & **Van Zandt, T.** (2008). An integrated model of discrete choice and response time. *Journal of Marketing Research*, **45**, 593-607.
  18. Sieck, W.R., Merkle, E.C., & **Van Zandt, T.** (2007). Option fixation: A cognitive contributor to overconfidence. *Organizational Behavior and Human Decision Processes*, **103**, 68-83.
  17. Merkle, E.C. & **Van Zandt, T.** (2006). An application of the Poisson race model to confidence calibration. *Journal of Experimental Psychology: General*, **135**, 391-408.
  16. **Van Zandt, T.** & Maldonado-Molina, M.A. (2004). Response reversals in recognition memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, **30**, 1147-1166.
  15. Peruggia, M., **Van Zandt, T.** & Chen, M. (2002). Was it a car or a cat I saw? An analysis of response times for word recognition. *Case Studies in Bayesian Statistics*, **VI**, 319-334.
  14. **Van Zandt, T.** (2000). ROC curves and confidence judgments in recognition memory. *Journal of Experimental Psychology: Learning, Memory and Cognition*, **26**, 582-600.
  13. **Van Zandt, T.** (2000). How to fit a response time distribution. *Psychonomic Bulletin and Review*, **7**, 424-465.
  12. **Van Zandt, T.**, Colonius, H., & Proctor, R. W. (2000). A comparison of two response time models applied to perceptual matching. *Psychonomic Bulletin and Review*, **7**, 208-256.
  11. Smith, P.L. & **Van Zandt, T.** (2000). Time-dependent Poisson counter models of response latency in simple judgment. *British Journal of Mathematical and Statistical Psychology*, **53**, 293-315.
  10. Ratcliff, R., **Van Zandt, T.**, & McKoon, G. (1999). Connectionist and diffusion models of reaction time. *Psychological Review*, **106**, 261-300.

9. Ratcliff, R., **Van Zandt, T.**, & McKoon, G. (1995). Process dissociation, single-process theories, and recognition memory. *Journal of Experimental Psychology: General*, **124**, 352-374.
8. **Van Zandt, T.**, & Ratcliff, R. (1995). Statistical mimicking of reaction time data: Single-process models, parameter variability and mixtures. *Psychonomic Bulletin and Review*, **2**, 20-54.
7. Proctor, R.W., Lu, C.-H., **Van Zandt, T.**, & Weeks, D.J. (1994). Affordances, codes, and decision processes: A response to Michaels (1993). *Journal of Experimental Psychology: Human Perception and Performance*, **20**, 452-455.
6. **Van Zandt, T.**, & Townsend, J. T. (1993). Self-terminating versus exhaustive processes in rapid visual and memory search: An evaluative review. *Perception & Psychophysics*, **53**, 563-580.
5. Proctor, R.W., **Van Zandt, T.**, Lu, C.-H., & Weeks, D.J. (1993). Stimulus-response compatibility for moving stimuli: Perception of affordances or directional coding? *Journal of Experimental Psychology: Human Perception and Performance*, **19**, 81-91.
4. Proctor, R.W., Lu, C.-H., & **Van Zandt, T.** (1992). Enhancement of the Simon effect by response precuing. *Acta Psychologica*, **81**, 53-74.
3. Proctor, R.W., Reeve, T.G., Weeks, D.J., Dornier, L., & **Van Zandt, T.** (1991). Acquisition, retention, and transfer of response selection skill in choice reaction tasks. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, **17**, 497-506.
2. Proctor, R.W., Healy, A.F., & **Van Zandt, T.** (1991). Same-different judgments of multiletter strings: Insensitivity to positional bias and spacing. *Perception & Psychophysics*, **49**, 62-72.
1. Proctor, R.W., **Van Zandt, T.**, & Watson, H. (1990). Effects of background symmetry on same-different pattern matching: A compromise-criteria account. *Perception & Psychophysics*, **48**, 543-550.

#### CHAPTERS (\*Peer reviewed)

8. Townsend, J. T., Yang, H., & **Van Zandt, T.** (2015). Information processing architectures: Fundamental issues. In J.D. Wright (Ed.) *International Encyclopedia of Social and Behavioral Sciences* (2nd Edition), (pp. 77-82). Amsterdam: Elsevier.
7. Craigmile, P. F., Peruggia, M. & **Van Zandt, T.** (2013). A Bayesian Hierarchical Model for Response Time Data Providing Evidence for Criteria Changes Over Time. In Michael Edwards and Robert C. MacCallum (Eds.) *Current Topics in the Theory and Application of Latent Variable Models* (pp. 42-61). New York, NY: Routledge.
6. \***Van Zandt, T.** & Townsend, J. T. (2013). Designs for and Analysis of Reaction Time Experiments. In Todd D. Little (Ed.) *Oxford Handbook of Quantitative Methods, Volume 1: Foundations* (pp. 260-285). Oxford University Press.
5. **Van Zandt, T.** & Townsend, J. T. (2012). Mathematical Psychology. In Harris Cooper (Ed.) *APA Handbook of Research Methods in Psychology, Volume 2* (Chapter 20). Washington, D. C.: APA Books.

4. \*Craigmiller, P.F., Peruggia, M. & **Van Zandt, T.** (2010). Detrending response time series. In S.-M. Chow, E. Ferrer, & F. Hsieh (Eds.) *Statistical Methods for Modeling Human Dynamics: An Interdisciplinary Dialogue*. Notre Dame Series on Quantitative Methodology (Vol. 4). New York: Taylor and Francis.
3. \***Van Zandt, T.** (2002). Analysis of response time distributions. In J. T. Wixted and H. Pashler (Eds.) *Stevens' Handbook of Experimental Psychology* (3rd Edition), 461-516. New York: Wiley Press.
2. Proctor, R. W., Reeve, T. G., & **Van Zandt, T.** (1992). Salient-features coding in response selection. In G. Stelmach & J. Requin (Eds.) *Tutorials in motor behavior II* (pp. 727-741). Amsterdam: North Holland.
1. Townsend, J. T., & **Van Zandt, T.** (1990). New theoretical results on testing self-terminating versus exhaustive processing in rapid search experiments. In H.-G. Geissler (Ed.) *Psychological Explorations of Mental Structures* (pp. 469-489). Toronto: Hogrefe & Huber.

## BOOKS

4. Palestro, J. J., Sederberg, P. B., Osth, A. F., **Van Zandt, T.**, Turner, Brandon M. (in press). *Likelihood-Free Methodology*. Springer Series: Computational Approaches to Cognition and Perception. New York, NY: Springer.
3. Proctor, R. W. & **Van Zandt, T.** (2018). *Human Factors in Simple and Complex Systems (3rd Ed.)*. Boca Raton, FL: CRC Press.
2. Proctor, R. W. & **Van Zandt, T.** (2008). *Human Factors in Simple and Complex Systems (2nd Ed.)*. Boca Raton, FL: CRC Press.
1. Proctor, R. W. & **Van Zandt, T.** (1994). *Human Factors in Simple and Complex Systems*. Needham Heights, MA: Allyn & Bacon.

## OTHER

4. **Van Zandt, T.** (2018). In vivo: Using multiple approaches to multiple participants. In Simon Farrell and Stephan Lewandowsky *Computational Modeling of Cognition and Behavior*. Cambridge: Cambridge University Press.
3. **Van Zandt, T.** (2013). Reaction Time. In H. Pashler (Ed.) *Encyclopedia of the Mind*, Volume 2 (pp. 630-633). Thousand Oaks, CA: Sage Reference.
2. **Van Zandt, T.** (2009). *Measurement and Representation of Sensation* by H. Colonius and E. Dzhafarov (Eds.). *Psychometrika*, **74**.
1. **Van Zandt, T.** (2005). *Numerical Issues in Statistical Computing for the Social Scientist* by M. Altman, J. Gill, & M.P. McDonald. *Journal of the American Statistical Association*, **100**, 707-708.

## INVITED ADDRESSES AND SYMPOSIA

19. Kim, S., Potter, K., Craigmiller, P. F., Peruggia, M., & **Van Zandt, T.** (2015). Keynote Address: Exploring Individual Differences in Memory Performance with a Hierarchical Bayesian Model. Computational Approaches to Cognition Symposium. Chicago, IL, November, 2015.

18. Craigmile, P. F., Peruggia, M. & **Van Zandt, T.** (2014). Distinguishing Between Short-term Dependence and Trend in Bayesian Hierarchical Models of Response Time Data. Department of Psychological Sciences, Purdue University. West Lafayette, IN, March, 2014.
17. Craigmile, P. F., Peruggia, M. & **Van Zandt, T.** (2012). Distinguishing Between Short-term Dependence and Trend in Bayesian Hierarchical Models of Response Time Data. In M. L. Pennell (Organizer) Stochastic Models for Longitudinal and Time-to-Event Data. Symposium conducted at the 2012 Joint Statistical Meetings, San Diego, CA.
16. Craigmile, P. F., Peruggia, M. & **Van Zandt, T.** (2012). Distinguishing Between Short-term Dependence and Trend in Bayesian Hierarchical Models of Response Time Data. Department of Psychological and Brain Sciences, Indiana University. Bloomington, IN, September 2012.
15. **Van Zandt, T.** (2011). Temporal Contexts in Choice Response Time. Department of Statistics Seminar Series, The Ohio State University. Columbus, OH, April 2011.
14. Craigmile, P. F., Peruggia, M. and **Van Zandt, T.** (2010). A hierarchical Bayesian Framework for Series of Response Times. In John K. Kruschke (Organizer) Practical Benefits of Bayesian Data Analysis. Symposium conducted at the 51st Annual Meeting of the Psychonomics Society, St. Louis, MO.
13. Turner, B., **Van Zandt, T.** and Brown, S.D. (2010). The Pervasive Problem of Criterion Setting. In Ian G. Dobbins (Organizer) Criteria, Confidence and Recognition Memory. Symposium conducted at the 51st Annual Meeting of the Psychonomics Society, St. Louis, MO.
12. Turner, B., **Van Zandt, T.** and Brown, S.D. (2011). The Pervasive Problem of Criterion Setting. Context and Episodic Memory Symposium, Philadelphia, PA.
11. **Van Zandt, T.** (2010). Cognitive Decision Theory, 8th triennial Invitational Choice Symposium, North Key Largo, FL.
10. **Van Zandt, T.** & Peruggia, M. (2009). An overview of response time models in psychology. Summer 2009 Program on Psychometrics, Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, NC.
9. Merkle, E. C. & **Van Zandt, T.** (2008). Error in confidence judgments. Symposium on Cognitive Decision Theory, 41st annual meeting of the Society for Mathematical Psychology, Washington, D.C.
8. **Van Zandt, T.** & Jones, M.R. (2008). Temporal Contexts in Choice Response Time. University of Cincinnati Cognition, Action & Perception Seminar Series, Cincinnati, OH.
7. **Van Zandt, T.** (2007). Presidential Address. 40th Annual Meeting of the Society for Mathematical Psychology, Irvine, CA.
6. **Van Zandt, T.** & Peruggia, M. (2003). Bayesian Analysis of Response Times. Department of Psychology, Indiana University, Bloomington, IN.
5. **Van Zandt, T.** & Peruggia, M. (2002). Plenary address, 33rd European conference on mathematical psychology, International University Bremen, Bremen, Germany.

4. **Van Zandt, T.** & Maldonado-Molina, M. (2002). Response reversals in recognition memory. Department of Psychology, Vanderbilt University, Nashville, TN.
3. **Van Zandt, T.** & Maldonado-Molina, M. (2001). Response reversals in recognition memory. Experimenteel-psychologische Onderzoekschool Computational Models of Memory Workshop, Amsterdam, Netherlands.
2. **Van Zandt, T.** & Maldonado-Molina, M. (2000). Response reversals in recognition memory. Fechner Day 2000: 16th annual meeting of the International Society for Psychophysics, Université Louis Pasteur, Strasbourg, France.
1. **Van Zandt, T.** (1998). Stochastic models of recognition memory. Department of Mathematical Sciences, The Johns Hopkins University, Baltimore, MD.

#### PROFESSIONAL PAPERS

41. Yan, Z., Craigmile, P.F., Peruggia, M., & **Van Zandt, T.** (2017). Hierarchical Hidden Markov Models for Response Time Data. 50th Annual Meeting of the Society for Mathematical Psychology, University of Warwick, Coventry.
40. Yan, Z., Craigmile, P.F., Peruggia, M., & **Van Zandt, T.** (2017). Hierarchical Hidden Markov Models for Response Time Data. 10th International Workshop on Bayesian Inference in Stochastic Processes (BISP10). Bocconi University, Milano.
39. Choi, S. W., Craigmile, P.F., Peruggia, M., & **Van Zandt, T.** (2016). Modeling Mindless Choice. 49th Annual Meeting of the Society for Mathematical Psychology, Rutgers, NJ.
38. Peruggia, M., Craigmile, P.F., & **Van Zandt, T.** (2016). Bayesian models for response times in cognitive experiments. International Society for Bayesian Analysis, Cagliari, Italy.
37. Potter, K. and **Van Zandt, T.** (2015). Perfectionism, decision-making and post-error slowing. 56th annual meeting of the Psychonomics Society. Chicago, IL.
36. Kim, S., Potter, K., Craigmile, P.F., Peruggia, M., & **Van Zandt, T.** (2015). A Bayesian Race Model for Recognition Memory. Joint Statistical Meetings, Seattle, WA.
35. Houpt, J.W., MacEachern, S.N., Peruggia, M., Townsend, J.T. & **Van Zandt, T.** (2015). Semi-parametric Bayesian approaches to systems factorial technology. 48th Annual Meeting of the Society for Mathematical Psychology, Newport Beach, CA.
34. Kim, Sungmin, Potter, K., Craigmile, P.F., Peruggia, M. & **Van Zandt, T.** (2014). A Bayesian Race Model to Decompose Recognition Memory Performance. 47th Annual Meeting of the Society for Mathematical Psychology, Québec City, Québec.
33. Dennis, S., Sederberg, P.B., Turner, B.M. & **Van Zandt, T.** (2013). Approximate Bayes Computation in Cognitive Modeling. Approximate Bayesian Computation in Rome, Sapienza Università di Roma, Rome, Italy.

32. Turner, B.M. , Dennis, S. & **Van Zandt, T.** (2011). Bayesian Analysis of Memory Models. 44th Meeting of the Society for Mathematical Psychology, Boston, MA.
31. Turner, B.M. and **Van Zandt, T.** (2010). Hierarchical approximate Bayesian computation. 43rd Meeting of the Society for Mathematical Psychology, Portland, OR.
30. Olson, K. and **Van Zandt, T.** (2010). Bayesian hierarchical model evaluation for the Receiver Operating Characteristic in recognition memory. 43rd Annual Meeting of the Society for Mathematical Psychology, Portland, OR. *Winner of the Cognitive Science Society Best Student Poster Award.*
29. Turner, B.M. and **Van Zandt, T.**, and Brown S. (2009). A nonparametric model for signal detection. 42nd Annual Meeting of the Society for Mathematical Psychology, Amsterdam, Netherlands.
28. **Van Zandt, T.** & Jones, M.R. (2007). Temporal Contexts in Choice Response Time. 48th Annual Meeting of the Psychonomics Society, Long Beach, CA.
27. **Van Zandt, T.** & Jones, M.R. (2007). Temporal Contexts in Choice Response Time. 40th Annual Meeting of the Society for Mathematical Psychology, Irvine, CA.
26. Otter, T. , Allenby, G.M., & **Van Zandt, T.** (2005). An integrated model of choice and response time with application to conjoint analysis. Joint Statistical Meetings, Minneapolis, MN.
25. Otter, T. , Allenby, G.M., & **Van Zandt, T.** (2005). An integrated model of choice and response time with application to conjoint analysis. IMPS 2005, the 14th International Meeting and the 70th Annual Meeting of the Psychometric Society, Tilburg, Netherlands.
24. Merkle, E.C. & **Van Zandt, T.** (2005). Implementing psychological models in WinBUGS. 38th annual meeting of the Society for Mathematical Psychology (Workshop), Nashville, TN.
23. Otter, T. , Allenby, G.M., & **Van Zandt, T.** (2005). An integrated model of choice and response time with application to conjoint analysis. 16th Advanced Research Techniques Forum, American Marketing Association, Coeur d'Alene, ID.
22. Merkle, E.C. , Sieck, W.R. & **Van Zandt, T.** (2004). The impact of random error corrections on overconfidence data. Annual meeting of the Society for Judgment and Decision Making, Minneapolis, MN.
21. Peruggia, M. , Craigmile, P.F., & **Van Zandt, T.** (2004). Modeling dependence in response time data. Joint Statistical Meetings, Toronto, Canada.
20. Nierman, C. , Peruggia, M., & **Van Zandt, T.** (2004). Fitting response time models by adaptive importance sampling. Joint Statistical Meetings, Toronto, Canada.
19. **Van Zandt, T.** (2004). A nonparametric test for hazard function monotonicity. 37th annual meeting of the Society for Mathematical Psychology, University of Michigan, Ann Arbor, MI.



18. Merkle, E.C. , Sieck, W.R. & **Van Zandt, T.** (2003). Independent assessment methods for improving probability judgment accuracy. Annual meeting of the Society for Judgment and Decision Making, Vancouver, Canada.
17. **Van Zandt, T.**, Peruggia, M., & Chen, M. (2002). Bayesian analysis of response times. 35th annual meeting of the Society for Mathematical Psychology, Miami University, Oxford OH.
16. Merkle, E. & **Van Zandt, T.** (2002). Confidence modeling in perceptual tasks. 35th annual meeting of the Society for Mathematical Psychology, Miami University, Oxford OH.
15. Chen, M., Peruggia, M., & **Van Zandt, T.** (2001). Was it a car or a cat I saw? An analysis of response times for word recognition. Case studies in Bayesian statistics, Workshop 6, Carnegie Mellon University, September 2001.
14. **Van Zandt, T.** & Maldonado-Molina, M. (2000). Response reversals in recognition memory. 33rd annual meeting of the Society for Mathematical Psychology, Queens University, Kingston, ON.
13. **Van Zandt, T.** & Yantis, S. (1998). Optimal methods for fitting reaction time distributions. 39th annual meeting of the Psychonomic Society, Dallas, TX.
12. **Van Zandt, T.** & Yantis, S. (1998). Parameter estimation by fits to density and distribution functions. 31st annual meeting of the Society for Mathematical Psychology, Vanderbilt University, Nashville, TN.
11. Parkhurst, D., Niebur, E., & **Van Zandt, T.** (1997). Residual neural activity in a model of short-term visual priming. 27th annual meeting of the Neuroscience Society, New Orleans, LA.
10. Parkhurst, D., **Van Zandt, T.**, & Niebur, E. (1997). Short term priming due to residual neural activity? 4th annual meeting of the Cognitive Neuroscience Society, Boston, MA.
9. **Van Zandt, T.** (1996). Confidence judgments in recognition memory: A two-choice decision is not the same as a six-choice decision. 29th annual meeting of the Society for Mathematical Psychology, University of North Carolina, Chapel Hill, NC.
8. Ratcliff, R. & **Van Zandt, T.** (1995). The diffusion model and signal detection. 36th annual meeting of the Psychonomic Society, Los Angeles, CA.
7. Ratcliff, R., **Van Zandt, T.**, & McKoon, G. (1994). Process dissociation and memory models. 35th annual meeting of the Psychonomic Society, St. Louis, MO.
6. Ratcliff, R. & **Van Zandt, T.** (1994). Comparing two connectionist models of reaction time. 27th annual meeting of the Society for Mathematical Psychology. University of Washington, Seattle, WA.
5. **Van Zandt, T.** & Ratcliff, R. (1993). Mimicking multiple processes with single-process models: Mixtures and parameter drift. 26th annual meeting of the Society for Mathematical Psychology, University of Oklahoma, Norman, OK.
4. **Van Zandt, T.** (1991). A nonhomogeneous Poisson model of same-different matching. 24th annual meeting of the Society for Mathematical Psychology,

Indiana University, Bloomington, IN.

3. Proctor, R. W., **Van Zandt, T.**, Lu, C.-H., & Weeks, D. J. (1990). S-R compatibility for destination of apparent motion: Catching affordances or directional coding? 31st annual meeting of the Psychonomic Society, New Orleans, LA.
2. **Van Zandt, T.**, Colonius, H., & Proctor, R.W. (1990). Accumulation of information in same-different matching. 23rd annual meeting of the Society for Mathematical Psychology, University of Toronto, Toronto, ON.
1. **Wooten, T.** & Townsend, J.T. (1988). New theoretical results on testing self-terminating vs. exhaustive processing in rapid search experiments. 21st annual meeting of the Society for Mathematical Psychology, Northwestern University, Evanston, IL.

## EDUCATIONAL ACTIVITIES

### Ph.D. Students

Kevin W. Potter, Ph.D.; "Perfectionism, decision-making, and post-error slowing," Fall, 2014

Brandon Turner, Ph.D.; "Likelihood-free Bayesian Modeling," Fall, 2011

Kenneth Olson, Ph.D.; "A model of dynamic choice, confidence, and motor response," Winter, 2012

Edgar C. Merkle, Ph.D.; "Bayesian Estimation of Factor Analysis Models with Incomplete Data," Fall, 2005

David Scrams, Ph.D.; "Combining Information in Forced-Choice Recognition Memory" Fall, 1997

### M.A. Students

Vyacheslav Nikitin, M.A.; "Parameter dependencies in an accumulation-to-threshold model of simple choice behavior." Fall, 2015.

Kevin Potter, M.A.; "When you are confident that you are wrong: Response reversals and the expanded Poisson race model," Fall, 2011

Brandon Turner, M.A.; "Signal Detection Theory: A proposal for a Nonparametric Model," Spring, 2009

Kenny Olson, M.A.; "Confidence for Choices with an Implausible Alternative," Fall, 2008

Edgar C. Merkle, M. A.; "An application of the Poisson race model to confidence calibration," Spring 2003

Kayoko Okada, M.A.; "ROC Curves from Feeling of Knowing Judgments," Spring, 1999

Derrick Parkhurst, M.A.; "Distinct processing stages and behavioral effects in short-term visual priming" Spring, 1998

James E. Manchester, M.A.; "Sources of Information in Recognition Memory" Spring, 1996

### Courses Taught

Introductory Statistical Methods

Advanced Statistical Methods

Data Analysis for Modeling  
Psychology of Extraordinary Beliefs  
Introduction to Mathematical Psychology  
Introduction to Human Memory  
Models of Perception and Memory  
Neural Network Modeling  
Cognitive Psychology  
Human Factors  
Introduction to Social Cognition  
Bayesian Computation  
Introduction to Bayesian Statistics for Psychological Data

#### Curriculum Development

Data Analysis for Modeling (Offered Winter 2003)  
Introduction to Mathematical Psychology (Offered biannually from Winter 2004)  
Psychology of Extraordinary Beliefs (Critical Thinking, with Mike Vasey; Offered from Autumn 2004 - present)  
Testing and Society (Initiated senior capstone course, taught by Nancy Betz and Michael Edwards 2006 - 2007)  
Bayesian Computation (Offered Spring 2013)  
Introduction to Bayesian Statistics for Psychological Data (Offered from Fall 2014 - present)

#### Program Development

Graduate Interdisciplinary Specialization in Quantitative Methods in Consumer Behavior (with Angela Dean (Statistics) and Greg Allenby (Marketing), approved January 2009)  
Graduate Concentration in Cognitive Modeling (with Roger Ratcliff, initiated Fall 2005)

#### Undergraduate Mentorship

Faculty advisor, Secular Student Alliance (formerly Students for Freethought), 2008-present  
Faculty mentor, Summer Research Opportunities Program (SROP) 2007, Ray Parr, Sonoma State University, "Modeling individual differences with IRT and the diffusion model"  
Faculty mentor, Statistics Research Experience for Undergraduates, The Ohio State University, 2003. Maria Salotti, University of Wisconsin, "Outliers in response time data."  
Faculty mentor, Statistics Research Experience for Undergraduates, The Ohio State University, 2002. Emily Johnson, Dartmouth University, "Time series analysis of response time data."  
Faculty mentor, The Learning Bridge, 2002  
Leadership Alliance mentor, 1997-1998  
American Psychological Association Summer Science Institute faculty participant 1997, 1998

## K-12 Education

Anatomy dissection (2015-present). *With Ben Givens, I assisted in the organization and implementation of dissection activities at Metro Early College High School.*

French Club supervisor, Metro Early College Experience High School/Middle School (2014-2015)

Math and reading tutor, Ecole Kenwood public school (2009-2014)

Mobile eye dissection laboratory (2012-2013). *I organized a mobile eye dissection laboratory for the Ecole Kenwood latchkey class and Ecole Kenwood grades 2-5. This involved obtaining materials (eyes, tools and safety equipment) and assembling and training a team of volunteers from the OSU Department of Psychology to perform the dissections.*

Wonders of Our World Collaborative Science Education (<http://wow.osu.edu/>), 2009-2011. *This program paired working scientists with elementary school teachers for science training in the Columbus Public Schools. I gave science demonstrations once per week at Ecole Kenwood.*

## PROFESSIONAL SERVICE

### Editorial Positions and Reviewing

Associate Editor, 2004-present. *Journal of Mathematical Psychology*

Associate Editor, 1994-1997. *Behavior Research Methods, Instruments and Computers*

Consulting Editor, 2007-2009. *Psychonomic Bulletin and Review*

Consulting Editor, 2001-2004. *Journal of Experimental Psychology: Learning, Memory & Cognition*

Ad-hoc Journal Reviewer:

*Acta Psychologica, Attention, Perception and Psychophysics, Bayesian Analysis, Cognitive Psychology, Current Directions in Psychological Science, Journal of Applied Psychology, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Human Perception & Performance, Journal of Experimental Psychology: Learning, Memory & Cognition, Journal of Mathematical Psychology, Journal of Memory and Language, Memory and Cognition, Psychology and Aging, Psychological Bulletin and Review, Psychological Methods, Psychological Review, Psychological Science, Quarterly Journal of Experimental Psychology Section A*

### Funding Agencies

NSF Perception, Action and Cognition College of Reviewers (2013-present)

National Science Foundation workshop on the future of the Measurement, Methodology and Statistics panel (2015).

National Science Foundation, Measurement, Methodology and Statistics Panel (2012-2013)

NSF Perception, Action and Cognition Panel (2009)

NSF Social, Behavioral and Economic Sciences Committee of Visitors (2007)

NSF Mathematical Social and Behavioral Sciences Panel (2006)

NIH Special Emphasis Panel (2006)

NSF Perception, Action and Cognition Panel (2002-2005)

Ad-hoc Reviewer:

*National Science Foundation: Perception, Action and Cognition, National Institutes of Health, Natural Sciences and Engineering Research Council of Canada*

#### Professional Affiliations

Society for Mathematical Psychology

Society for Judgment and Decision Making

American Statistical Association

#### Executive Offices

Vice-president, Society for Mathematical Psychology (2007-2008)

President, Society for Mathematical Psychology (2006-2007)

Executive Committee (elected), 2003-2009. Society for Mathematical Psychology

#### Consultant

Nationwide Center for Advanced Customer Insights (2008)

#### Administrative Service

##### Departmental committees

2016-2017 Chair, Quantitative Search Committee

2016-present Psychology Peer Review Committee (elected)

2014-2016 Weary Chair Search Committee

2014-present Quantitative Area Coordinator

2014-2015 Psychology department chair, Search Committee

2013-2015 Psychology Peer Review Committee (elected)

2012-2013 Chair, Quantitative Search Committee

2012-2013 Statistics Search Committee

2011-2012 Chair, Quantitative Search Committee

2010-2016 Chair, Psychology Ethics Committee

2010-2011 Psychology Peer Review Committee (elected)

2009-2010 Judgment and Decision Making Search Committee

2006-2007 Judgment and Decision Making Search Committee

2005-2009 Quantitative Area Coordinator

Numerous other committees, including Diversity, Graduate Studies, Technical Services, and earlier searches.

##### College and University committees

2017 Ad hoc Committee Chairs Compensation Committee

*This committee met to establish guidelines for the compensation of university committee chairs.*

2016-2017 Ad hoc "04 Rule" Committee

*This committee was formed by the Provost and Faculty Council to examine problems with the University's sexual misconduct policy as it relates to the Faculty Rules. Its charge is to make recommendations to the Provost's office and Faculty Council on possible revisions to the rule and/or the policy.*

2016-present ASC Faculty Advisory Council (elected)

2010-present Committee on Academic Misconduct

2014-2016 Faculty Rules Committee (Chair 2015-2016)

2013-2015 University Steering Committee (elected)

2013-2016 University Senate (elected)

2012-2014 Faculty Hearing Committee

2011-2012 Faculty Rules Committee

2010-2013, University Senate (elected)

2009-2011 SBS Investigation Committee

#### Other Service

2014-present Advisory Board, Society for Mathematical Psychology's Women of Mathematical Psychology

2015-2017 President and Provost's Leadership Institute, The Ohio State University, Columbus OH.

2014 Workshop organizer and presenter, "Methods for Model Fitting," Purdue University, West Lafayette, IN.

2012 Co-Organizer, 45th Annual Meeting of the Society for Mathematical Psychology, Columbus, Ohio. With Simon Dennis, Mark Pitt and Roger Ratcliff.

2010-2012 Founder, Organizer and Chair, Society for Mathematical Psychology Women's Symposium (Women of Mathematical Psychology).

2007-2012 Webmaster, Society for Mathematical Psychology  
(<http://www.mathpsych.org>).

2006 Workshop Organizer, "Bayesian Methods of the Analysis of Psychological Data," 39th Annual Meeting of the Society for Mathematical Psychology, Memphis, TN.

2004 Organizer, Hoosier Mental Life, Columbus, OH.

2002 Workshop organizer and presenter, Hoosier Mental Life, Columbus, OH.

#### COMMUNITY SERVICE

2017-present Habitat for Humanity volunteer

2017-present Columbus Humane volunteer