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CAREER OBJECTIVES

Develop, apply, publish, and teach the foundations useful for effective statistical modeling in the social sciences. My current research interests include Bayesian nonparametric methods for regression, density estimation, hierarchical and mixture modeling, causal modeling, statistical decision-making, model selection, order-restricted statistical inference, and item-response modeling.

EDUCATION

The University of Chicago **1996 To 1998**

Program: Measurement, Evaluation, and Statistical Analysis (MESA), Department of Education

Concentration: Psychometrics and statistics

Sample Coursework: Item response theory, hierarchical linear models, log-linear analysis, meta-analysis, test and questionnaire design, research design.

Dissertation Title: Measuring Non-Additive Conjoint Structures

Dissertation Chair: Professor Benjamin D. Wright

Degree: Doctor of Philosophy

Loyola University Chicago **1995 To 1996**

Program: Research Methodology, Department of Educational and Counseling Psychology

Concentration: Statistical Methods

Coursework: Advanced statistics, factor analysis, correlation methods, non-parametric statistics, survey research methods.

Degree Program: Master of Arts

Advisor: Professor Jack Kavanaugh

University of Illinois at Chicago **1991 To 1994**

Program: Applied Psychology

Degree: Bachelor of Arts

ACADEMIC APPOINTMENTS

University of Illinois at Chicago

Full Professor

2011 to present

Associate Professor (2005-2011), Assistant Professor (2002-2005)

Department of Educational Psychology, College of Education

Program in Measurement, Evaluation, Statistics, and Assessments.

Louisiana State University Health Sciences Center, New Orleans

1998 To 2002

Assistant Professor (tenure track)

Department of Public Health and Preventative Medicine, Biostatistics

Graduate school faculty for LSU Health Sciences Center, and LSU School of Nursing

MANUSCRIPTS IN PROGRESS

1. Karabatsos, G., and Walker, S.G. (2011). Bayesian unimodal density regression.
2. Kallemeyn, L., Karabatsos, G., Shriner, M., & Yasutake, D. (2011). Relating urban teacher knowledge and dispositions.
3. Talbott, E., & Karabatsos, G. (2012). Developmental patterns in heritability of antisocial behavior: A meta-analysis of twin, adoption, and sibling studies.
4. Karabatsos, G., Walker, S.G., and Talbott, E. (2012). A Bayesian nonparametric model for meta-analysis.

PUBLISHED MANUSCRIPTS, PEER REVIEWED (continued on next page)

1. Karabatsos, G., and Walker, S.G. (2012, in press). Bayesian nonparametric IRT. In chapter 19, *Handbook of Item Response Theory: Models, Statistical Tools, And Applications, Volume I* (W.J. van der Linden & R. Hambleton, Eds.). New York: Taylor & Francis.
2. Walker, S.G., and Karabatsos, G. (2012, in press). Revisiting Bayesian curve fitting using multivariate normal mixtures. In P. Damien, P. Dellaportas, N. Polson, and D. Stephens (Eds.), *Bayesian Theory and Applications*. Oxford University Press.
3. Karabatsos, G., and Walker, S.G. (2012). A Bayesian nonparametric causal model. *Journal of Statistical Planning and Inference*, 142, 925-934.
4. Karabatsos, G., and Walker, S.G. (2012, in press). Bayesian nonparametric mixed random utility models. *Computational Statistics & Data Analysis*, 56, 1714-1722
5. Walker, S.G., and Karabatsos, G. (2012, to appear). Revisiting Bayesian curve fitting using multivariate normal mixtures. In P. Damien (Ed.), *Hierarchical Models and Markov Chain Monte Carlo Conference in Honour of Adrian F.M. Smith*, held on June 2011, Crete, Greece.
6. Talbott, E., Fleming, J., Karabatsos, G., & Dobria, L. (2011). Making sense of minority student classification into special education: School context matters. *International Journal of Special Education*, 26, 3.

7. Karabatsos, G., & Walker, S.G. (2010). A Bayesian nonparametric model for test equating. In Chapter 11 (pp. 175-184) of A. von Davier (Ed.), *Statistical Models for Equating, Scaling, and Linking*. New York: Springer.
8. Lin, H.-W., Pickard, A.S., Mahady, G.B., Karabatsos, G., Crawford, S.Y., Popovich, N.G. (2010, to appear). An instrument to evaluate patient counseling provision on herbs and dietary supplements. *American Journal of Pharmaceutical Education*, 74 (10), Article 192.
9. Karabatsos, G., & Walker, S.G. (2010). A Bayesian nonparametric model for test equating. In Ch. 11 of A. von Davier (Ed.), *Statistical Models for Equating, Scaling, and Linking*.
10. Karabatsos, G. (2010). Probabilistic Models for Some Intelligence and Attainment Tests (Rasch). In Neil Salkind (Ed.), *Encyclopedia of Research Design*, Vol. 2, pp. 1102-1104. Sage Publications.
11. Mattson C.L., Campbell R.T., Karabatsos G., Agot K., Ndinya-Achola J.O., Moses S., Bailey R.C. (2010). Scaling Sexual Behavior or "Sexual Risk Propensity" Among Men at Risk for HIV in Kisumu, Kenya. *AIDS and Behavior*, 14, 162-72.
12. Karabatsos, G. (2009). Modeling heteroscedasticity in the single index model with the Dirichlet Process. *Advances and Applications in Statistical Sciences*, 1, 83-104.
13. Karabatsos, G., & Walker, S.G. (2009). Rejoinder On Normalized Maximum Likelihood and Bayesian Decision Theory: Reply to Grünwald and Navarro (2009). *Journal of Mathematical Psychology*, 53, 52.
14. Karabatsos, G., & Walker, S.G. (2009). A Bayesian nonparametric approach to test equating. *Psychometrika*, 74, 211 - 232.
15. Muckle, T., and Karabatsos, G. (2009). Hierarchical Generalized Linear Models for the Analysis of Judge Ratings. *Journal of Educational Measurement*, 46, 198-219.
16. Karabatsos, G., & Walker, S.G. (2009). Coherent Psychometric Modeling With Bayesian \Nonparametrics. *British Journal of Mathematical and Statistical Psychology*, 62, 1-20.
17. Gibbons, R.D., Segawa, E., Karabatsos, G., Amatya, A.K., Brown, C.H., Kapur, K., Marcus, S., Bhaumik, D.K., Hur, K., & Mann, J.J. (2008). Random-effect Poisson Regression Analysis of Adverse Event Reports: The Relationship Between Antidepressants and Suicide. *Statistics in Medicine*, 27, 1814–1833.
18. Myung, J.I., Karabatsos, G., and Iverson, G. (2008). A statistician's view on Bayesian Evaluation of informed hypothesis. In Chapter 15 of H. Hoijtink, I. Klugkist, and P.A. Boelen (Eds.), *Bayesian Evaluation of Informative Hypotheses*, pp. 309-327. New York: Springer.
19. Karabatsos, G., & Walker, S.G. (2007). Bayesian nonparametric inference of stochastically ordered distributions, with Polya Trees and Bernstein Polynomials. *Statistics & Probability Letters*, 77, 907-913.
20. Van Lente, E., Karabatsos, G., & Uekawa, K. (2007). A Bootstrap Approach to Rating Scale Optimization. In W.P.F. Fisher & M. Wilson [Eds.], *Access to the Foundations of Measurement: Professional Identity in the Career of Benjamin D. Wright*. Forthcoming.
21. Karabatsos, G., & Walker, S.G. (2006). On the normalized maximum likelihood and Bayesian decision theory. *Journal of Mathematical Psychology*, 50, 517-520.
22. Karabatsos, G. (2006). Bayesian nonparametric model selection and model testing. *Journal of Mathematical Psychology*, 50, 123-148.
23. Karabatsos, G., and Walker, S.G. (2006). Normalized maximum likelihood and Bayesian decision theory. *Journal of Mathematical Psychology*, 50, 517-520.

24. Karabatsos, G. (2006). Bayesian nonparametric model selection and model testing. *Journal of Mathematical Psychology*, *50*, 123-148.
25. Maslak, A.A., Karabatsos, G., Tatijana S., Anisimova, T.S., and Osipov, S.A. (2005). Measuring and Comparing Higher Education Quality between Countries Worldwide. *Journal of Applied Measurement*, *6*, 432-42.
26. Myung, J., Karabatsos, G., & Iverson, G. (2005). A Bayesian approach to testing decision making axioms. *Journal of Mathematical Psychology*, *49*, 205-225.
27. Karabatsos, G. (2005). The exchangeable multinomial model as an approach for testing axioms of choice and measurement. *Journal of Mathematical Psychology*, *49*, 51-69.
28. Karabatsos, G. (2005). Additivity testing. In B. Everitt and D.C. Howell [Eds.], *Encyclopedia of Behavioral Statistics*, pp. 25–29. New York: John Wiley & Sons.
29. Fisher, W.P., & Karabatsos, G. (2005). Making the case of fundamental measurement: MEPS/CAHPS Quality of Care Scales. In Chapter 19 of N. Bezruczko (Ed.), *Rasch Measurement In The Health Sciences*. Chicago: Institute for Objective Measurement.
30. Karabatsos, G., & Sheu, C.-F. (2004). Bayesian order constrained inference for dichotomous models of unidimensional non-parametric item response theory. *Applied Psychological Measurement*, *28*, 110-125.
31. Karabatsos, G., & Batchelder, W.H. (2003). Markov Chain Monte Carlo estimation for test theory without an answer key. *Psychometrika*, *68*, 3, 373-389.
32. Karabatsos, G. (2003). Comparing the aberrant response detection performance of thirty-six person-fit statistics. *Applied Measurement In Education* *16*, 277-298.
33. Taylor, L., Hammond, J., DiCarlo, R., Karabatsos, G., Deblieux, P. (2003). A student-initiated elective on end-of-life care: A unique perspective. *Journal of Palliative Medicine*, *6*, 86-92.
34. Hendrix, C., Sakauye, K., Karabatsos, G., & DaiGLE, D. (2003). Use of the Minimum Data Set to identify depression in the elderly. *Journal of the American Medical Directors Association*, *4*(6), 308-312.
35. Karabatsos, G. & Ullrich, J.R. (2002). Enumerating and testing conjoint measurement models. *Mathematical Social Sciences*, *43*, 487-505. Special Issue on Random Utility and Probabilistic Measurement Theory, A.A.J. Marley, guest editor.
36. Karabatsos, G. (2001). The Rasch model, additive conjoint measurement, and new models of probabilistic measurement theory. *Journal of Applied Measurement*, *2*, 389-423.
37. Karabatsos, G. (2001). The Rasch model, additive conjoint measurement, and new models of probabilistic measurement theory. In E. Smith & R.M. Smith, (Eds.), *Introduction to Rasch Measurement*, Ch.24. Gainesville, FL: JAM Press.
38. Karabatsos, G. (2000). A critique of Rasch residual fit statistics. *Journal of Applied Measurement*, *1*, 152-176.
39. Karabatsos, G. (2000). Using Rasch measures for Rasch model fit analysis. *Popular Measurement*, *3*, 70-71.
40. Ullman, S., Karabatsos, G., Koss, M. (1999). Alcohol and sexual assault for a national sample of college men. *Psychology of Women Quarterly*, *23*, 673-689.
41. Ullman, S., Karabatsos, G., Koss, M. (1999). Alcohol and sexual assault for a national sample of college women. *Journal of Interpersonal Violence*, *14*, 603-625.
42. Karabatsos, G. (1998). Measuring non-additive data structures: Compounding events by Rasch model probabilities. *Journal of Outcome Measurement*, *2*, 191-221.

43. Karabatsos, G. (1998). Occam's Razor at work. *Rasch Measurement Transactions*, 11, 587-588.
44. Karabatsos, G. (1998). Psychology: What is in the criminal's mind? A picture is worth a thousand words. *Popular Measurement*, 1, 80.
45. Karabatsos, G. (1997). The Sexual Experiences Survey: Interpretation and validity. *Journal of Outcome Measurement*, 1, 305-328.
46. Karabatsos, G. (1997). Omit inconsequential responses. *Rasch Measurement Trans*, 10, 523.
47. Cella, D.F., Dineen, K., Arnason, B., Reder, A., Webster, K.A., Karabatsos, G., Chang, C., Lloyd S., Steward, J., & Stefoski, D. (1996). Validation of the Functional Assessment of Multiple Sclerosis (FAMS) quality of life scale. *Neurology*, 47, 129-139.

TECHNICAL REPORTS

1. Bontempo, B., Marks, C., & Karabatsos, G. (1998). *A meta-analytical assessment of empirical differences in standard setting procedures*. Educational Resources Information Center, document ED422352.

INVITED PRESENTATIONS

1. Karabatsos, G., and S.G. Walker (2012). *Bayesian unimodal density regression*. Presentation for the Department of Biostatistics, University of Illinois-Chicago, February 3.
2. Karabatsos, G., and S.G. Walker (2011). *Bayesian unimodal density regression*. State of the Art presentation, Seventeenth International Meeting of the Psychometric Society (IMPS2011), Hong Kong, July.
3. Karabatsos, G. (February 4, 2009). *A Bayesian Nonparametric Causal Model For Observational Studies*. Seminar, University of Illinois at Chicago, Department of Statistics. (Professor Samad Hedayat, host).
4. Karabatsos, G. (August, 2008). *Modeling heteroscedasticity in the single index model with the Dirichlet Process*. Session on Bayesian Nonparametrics, Joint Statistical Meetings of the American Statistical Association, Denver, Colorado (Sanjib Basu, Session Chair).
5. Gibbons, R.D., Segawa, E., Karabatsos, G., Amatya, A.K., Brown, C.H., Kapur, K., Marcus, S., Bhaumik, D.K., Hur, K., & Mann, J.J. (2008). *Random-effect Poisson Regression Analysis of Adverse Event Reports: The Relationship Between Antidepressants and Suicide*. Presentation for the Dept of Biostatistics, University of Illinois-Chicago (presenter was D.K. Bhaumik).
6. Karabatsos, G. (Sep 28, 2007). *Bayesian Variable Selection In Semiparametric Regression With Heteroscedasticity*. Seminar for Division of Statistics, Northern Illinois University (Sanjib Basu, host).
7. Karabatsos, G. (August 9, 2007). *Bayesian Nonparametric Single-Index Modeling*. Isaac Newton Institute Workshop on Construction and Properties of Bayesian Nonparametric Regression Models, Cambridge University, United Kingdom.
8. Karabatsos, G., & Walker, S.G. (April, 2007). *Bayesian Nonparametrics: Theory and Applications*. Chicago Chapter of the American Statistical Association (Louis Fogg, host).

9. Karabatsos, G. (March, 2007). *Bayesian Nonparametric Random Effects Modeling*. Presentation for the Dept of Biostatistics, University of Illinois-Chicago.
10. Karabatsos, G., & Walker, S.G. (June, 2006). *Model Selection With A Nonparametric Prior. Fifth Workshop on Bayesian Nonparametrics: Methodology, Theory, and Applications*. Jeju Island, South Korea (Conference Sponsored by the Statistical Research Center for Complex Systems of Seoul National University).
11. Karabatsos, G., & Walker, S.G. (April, 2006). *Model Selection With A Nonparametric Prior. Clyde Coombs conference, Session on Nonparametric Bayesian Inference*. University of Michigan, Ann Arbor (Jun Zhang, host).
12. Karabatsos, G., & Walker, S.G. (March, 2006). *Solving incoherence in model selection With Bayesian nonparametrics*. University of Illinois at Urbana-Champaign, seminar, Department of Psychology, Quantitative Psychology Program (Professor David Budescu, host).
13. Karabatsos, G. (December, 2005). *Incoherence in hypothesis testing and model selection*. One-hour guest presentation for UIC course on Rating Scale Analysis in the Educational Psychology area (Ev Smith, host).
14. Karabatsos, G. (October, 2005). *Bayesian Nonparametric Model Selection and Model Testing*. Statistical Seminar (Athanasios Kottas and David Draper, hosts), Department of Statistics, The University of California at Santa Cruz.
15. Karabatsos, G. (May, 2005). *Bayesian Cultural Consensus Theory. Conference on "May I Ask A Question Please? Psychometric Issues and Impacts"* (Mary Morrissey, host). Sponsored by the American Statistical Association, Chicago Chapter.
16. Karabatsos, G. (October, 2005). *Bayesian Nonparametric Model Selection and Model Testing*. Robert Wherry Lecture, Ohio State University (Robert Browne and Jay Myung, hosts), Rush University. Sponsored by the Department of Quantitative Psychology and the Department of Statistics.
17. Karabatsos, G. (January, 2005). *Bayesian Cultural Consensus Theory*. Workshop on Cognitive Psychometrics (William Batchelder, host), University of California at Irvine.
18. Karabatsos, G. (October, 2004). *A Bayesian non-parametric approach to testing stochastic order in several populations*. University of Illinois at Chicago, weekly seminar sponsored by the Department of Statistics. (Professor Samad Hedayat, host).
19. Karabatsos, G. (August, 2004). *A Bayesian approach to the Monotone Homogeneity Model of Nonparametric Item Response Theory*. Session on Recent Developments in Nonparametric Item Response Theory (van der Ark and K. Sijtsma, hosts), in the Sixth International Conference on Social Science Methodology, Amsterdam, The Netherlands.
20. Iverson, G., Karabatsos, G., & Myung, I.J. (June, 2004). *Intransitivity of preferences: Revisited*. Cognitive Science Colloquium, University of California at Irvine.
21. Iverson, G., Karabatsos, G., & Myung, I.J. (April, 2004). *Intransitivity of preferences: Revisited*. Department of Psychology, University of Adelaide, South Australia. (Doug Vickers, host).
22. Karabatsos, G. (January, 2004). *What would Bayes and de Finetti say to Kahneman and Tversky? (An exchangeable multinomial model for testing axioms of measurement and decision)*. Bayesian Research Conference (Michael Birnbaum, host).
23. Iverson, G., Karabatsos, G., & Myung, I.J. (January, 2004). *Let's do the money pump again (Intransitivity of Preference: Revisited)*. Bayesian Research Conference (M. Birnbaum, host).
24. Karabatsos, G. (July, 2003). *Bayesian approaches for testing axioms of measurement*. One hour plenary presentation for the Annual Mathematical Psychology meeting, invited by the

Society for Mathematical Psychology, for winning the New Investigator Award for year 2002.

25. Karabatsos, G. (April, 2003). *Bayesian model averaging for cognitive models*. University of Illinois at Chicago, weekly seminar sponsored by the Department of Statistics. (Professor Samad Hedayat, host).
26. Karabatsos, G. (March, 2003). *New Bayes approaches for testing axioms of measurement*. University of Illinois at Urbana-Champaign, monthly seminar, Department of Psychology, Quantitative Psychology Program (Professor Michel Regenwetter, host).
27. Karabatsos, G. (2002). *A general probabilistic IRT model for axiomatic conjoint measurement*. Paper presentation for symposium: "Educational Measurement: Is it really possible?" Trevor G. Bond, symposium chair. International Objective Measurement Workshop, New Orleans.
28. Karabatsos, G. (January, 2002). *MCMC Inference for some qualitative models in psychology: Model estimation, evaluation, and selection*. The Ohio State University, monthly seminar sponsored by the Department of Psychology, Quantitative Psychology Program (Professor Jay Myung, host).
29. Karabatsos, G. (April, 2001). *Consensus theory and Markov Chain Monte Carlo estimation*. DePaul University, monthly seminar sponsored by the Department of Experimental Psychology (Professor Ching-Fan Sheu, host).
30. Karabatsos, G. (January, 2001). *Order restricted inference methods for quantitative genetics*. Presented at Tulane University, Haywood Genetics Center.
31. Karabatsos, G. (January, 2001). *Markov Chain estimation theory and mathematical psychology: Implications for item response theory*. Presentation for the Institute for Mathematical Behavioral Sciences, University of California at Irvine.
32. Karabatsos, G. (November, 2000). Multinomial Processing Tree models for psychiatric research. LSU Health Sciences Center, Department of Psychiatry.
33. Karabatsos, G. (2000). *Multinomial Processing Tree models for clinical psychology*. Monthly seminar of the Department of Public Health, LSU Health Sciences Center.
34. Karabatsos, G. (2000). *Explicating the medical decision making processes of physicians with multinomial processing tree models*. Presented in a meeting of the Medical Decision Making Committee, LSU Health Sciences Center.
35. Karabatsos, G. (2000). *Principles of scale development*. LSU School of Nursing, monthly meeting of scientific methods.

CONFERENCE PRESENTATIONS: STATISTICAL AND QUANTITATIVE

1. Karabatsos, G., and Walker, S.G. (2012). *A Bayesian Unimodal Density Regression Model, With Applications*. Poster presentation, International Society for Bayesian Analysis (ISBA) World Meeting, Kyoto, Japan.
2. Karabatsos, G., and S.G. Walker (2011). *A Bayesian nonparametric regression model*. Eighth Workshop on Bayesian Nonparametrics (June), Veracruz, Mexico.
3. Karabatsos, G., and Walker, S.G. (2011). *Bayesian Unimodal Density Regression for Causal Inference*. Conference of the Society for Research on Educational Effectiveness, Washington, D.C., September 8-10.

4. Karabatsos, G., and S.G. Walker (2011). *A Bayesian nonparametric regression model*. Eighth Workshop on Bayesian Nonparametrics (June), Veracruz, Mexico.
5. Karabatsos, G., and Walker, S.G. (2010). *A Bayesian Semiparametric Multivariate Causal Model, With Automatic Covariate Selection and For Possibly-Nonignorable Missing Data*.
6. Karabatsos, G. (August, 2009). *Bayesian nonparametric causal modeling*. Poster presented at the seventh Bayesian Nonparametric Workshop, Turin, Italy.
7. Karabatsos, G. (May 2, 2008). *Modeling heteroscedasticity in the single index model with the Dirichlet Process*. Seminar on Bayesian Inference and Econometrics, University of Chicago.
8. Myung, J.I., Karabatsos, G., and Iverson, G. (2007). *Inequality Constrained Bayesian Inference: Evaluation and Discussion*. Workshop on Null, Alternative, and Informative Hypotheses. Utrecht, Netherlands.
9. Myung, J.I., Iverson, G., and Karabatsos, G. (2007). *Hierarchical Bayesian Models for Order-Constrained Data from Factorial Designs*. Poster presentation, Valencia / ISBA Eighth World Meeting on Bayesian Statistics. Alicante, Spain.
10. Karabatsos, G., and Walker, S.G. (April, 2007). *A Bayesian nonparametric approach to test equating*. Presented at the conference of the National Council of Measurement In Education, Chicago.
11. Dobria, L., Karabatsos, G., & Myford, C. (2007). *Monitoring Rater Performance With a Hierarchical Generalized Linear Model*. Presented at the conference of the National Council of Measurement In Education, Chicago.
12. Muckle, T., & Karabatsos, G. (2006). *FACETS analysis with Hierarchical Generalized Linear Modeling*. Presented at the Midwest Objective Measurement Seminar, Chicago.
13. Lin, H. W., Karabatsos, G., Jackson, T.R., Popovich, N.G. (2006) *A Bayesian Approach to the Multinomial Processing Tree Model for the Analysis of A Multiple-Choice Examination of Pharmacy Knowledge*. Midwest Social And Administrative Pharmacy Conference, University Of Minnesota, July 27-29.
14. Liu, X., & Karabatsos, G. (2006). *A Bayesian nonparametric approach to testing Essential Unidimensionality in Item response Theory*. Conference of the National Council of Measurement In Education (NCME).
15. Karabatsos, G. (July, 2005). *Bayesian non-parametric model selection and model testing*. Psychometrics Society Meeting (IMPS 2005), Session on Bayesian non-parametric and order-constrained Inference. Tilburg University, The Netherlands.
16. Iverson, G., Myung, I.J., & Karabatsos, G. (July, 2005). *Intransitivity of preference re-visited*. Psychometrics Society Meeting (IMPS 2005), Session on Bayesian non-parametric and order-constrained Inference. Tilburg University, The Netherlands.
17. Myung, I.J., Karabatsos, G., & Iverson, G. (July, 2005). *Bayesian order-constrained ANOVA*. Psychometrics Society Meeting (IMPS 2005), Session on Bayesian non-parametric and order-constrained Inference. Tilburg University, The Netherlands.
18. Myung, I.J., Karabatsos, G., & Iverson, G. (November, 2004). *Bayesian approaches for testing axioms of decision*. Psychonomics Meeting, St. Paul, Minneapolis.
19. Sheu, C.F., & Karabatsos, G. (September, 2004). *Testing for a Fechnerian representation using order-constrained Bayesian inference*. 35th European Mathematical Psychology Group Meeting, Ghent, Belgium.

20. Karabatsos, G. (July, 2004). *An exchangeable multinomial model for testing axioms of measurement and decision*. The 37th Annual Meeting of Society for Mathematical Psychology, University of Michigan.
21. Liu, X., & Karabatsos, G. (July, 2004). *A Bayesian approach to testing Essential Unidimensionality in Item Response Theory*. The 37th Annual Meeting of Society for Mathematical Psychology, University of Michigan.
22. Becker, K., & Karabatsos, G. (July, 2004). *A hierarchical Bayesian model for the classification of developmental groups based on complex constructed response data*. The 37th Annual Meeting of Society for Mathematical Psychology, University of Michigan.
23. Myung, I.J., Karabatsos, G., & Iverson, G. (July, 2004). *Bayesian approaches for testing decision axioms*. The 37th Annual Meeting of Society for Mathematical Psychology, University of Michigan.
24. Myung, I.J., Karabatsos, G., & Iverson, G. (July, 2004). *Bayesian approaches for testing axioms of decision*. Eleventh International Conference On The Foundations & Applications Of Utility, Risk and Decision Theory, Paris, France.
25. Karabatsos, G. (June, 2004). *Inference with Polya tree models under stochastic order*. Paper presented at the Fourth Workshop of Bayesian Non-Parametrics: Methodology, Theory, and Applications, University of Rome, Italy.
26. Becker, K., & Karabatsos, G. (May, 2004). *The parametric bootstrap for computing the exact confidence intervals of Rasch fit statistics*. Midwest Objective Measurement Seminar, University of Illinois-Chicago.
27. Myung, I.J., Karabatsos, G., & Iverson, G. (August, 2003). *Bayesian approaches for testing decision axioms*. European Mathematical Psychology Group Meeting, Vienna, Austria.
28. Karabatsos, G., & Sheu, C.-F. (August, 2003). *Testing cancellation axioms with the Bayesian bootstrap*. The 36th Annual Meeting of Society for Mathematical Psychology, Weber State University, Ogden, Utah.
29. Karabatsos, G., & Myung, C.-F. (August, 2003). *Testing additivity axioms with the Bayesian bootstrap*. Poster presentation, Joint Statistical Meetings of the American Statistical Association, San Francisco, California.
30. Myung, I.J., & Karabatsos, G. (August, 2003). *Bayesian approaches for testing decision axioms*. European Mathematical Psychology Group Meeting, Vienna, Austria, August.
31. Myung, I.J., & Karabatsos, G. (August, 2003). *Bayesian approaches for testing decision axioms*. Poster presentation, Applications in Bayesian Analysis workshop, Santa Cruz, California, August.
32. Myung, I.J., & Karabatsos, G. (August, 2003). *Bayesian approaches for testing decision axioms*. Poster presentation, Joint Statistical Meetings of the American Statistical Association, San Francisco, California.
33. Van Lente, E.J., & Karabatsos, G. (April, 2003). *A bootstrap approach to rating scale optimization*. Paper presented at the Festschrift in Honor of Benjamin D. Wright.
34. Karabatsos, G. (2002). *A general Bayes framework for isotonic regression*. Poster presented at the First Cape Cod workshop on Monte Carlo Methods, Hyannis, Massachusetts.
35. Karabatsos, G. (2002). *A comparison of 36 person fit statistics of item response theory*. Paper presented in a session entitled "Rasch person fit analysis," George Karabatsos, chair, in the International Objective Measurement Workshop conference, New Orleans.

36. Karabatsos, G., & Sheu, C.-F. (August, 2001). *Testing measurement theory axioms with Markov Chain Monte Carlo*. The 34th Annual Meeting of Society for Mathematical Psychology, Brown University, Providence, Rhode Island.
37. Hu, X., & Karabatsos, G. (2001). *Recursive general processing tree models for continuous-state cognitive processes*. The Third International Conference on Cognitive Science, Beijing.
38. Karabatsos, G. (January, 2001). *Testing Item Response Theory Models with Order Restricted Inference and Markov Chain estimation*. Annual regional meeting of the International Society for Bayesian Analysis, Laguna Beach, California (poster).
39. Karabatsos, G. (March, 2000). *Markov Chain Monte Carlo (MCMC) estimation for Multinomial Processing Tree Models: A Program In S-PLUS*. Paper presentation for the Annual Conference of the Society for Computers in Psychology, New Orleans.
40. Karabatsos, G., & Batchelder, W.H. (August, 2000). *Test theory without an answer key: New results with Markov-Chain Monte Carlo estimation*. The 33rd Annual Meeting of the Society for Mathematical Psychology, Kingston, Ontario, Canada.
41. Hu, X., & Karabatsos, G. (August, 2000). *Recursive General Processing Tree models*. The 33rd Annual Meeting of the Society for Mathematical Psychology, Kingston, Ontario.
42. Karabatsos, G., & Batchelder, W.H. (April, 2000). *Multinomial processing tree models for the measurement of cognition*. International Outcomes Measurement Conference 3, Chicago.
43. Karabatsos, G. (April, 2000). *Using Rasch measures for Rasch model fit analysis*. International Objective Measurement Workshop 10, New Orleans, Louisiana.
44. Karabatsos, G. (April, 2000). *Alternative data-Rasch Model agreement indices: The need for fundamental measurement*. Annual meeting of the American Educational Research Association, New Orleans, Louisiana.
45. Karabatsos, G., & Ullrich, J. (August, 1999). *The number of distributive and dual-distributive tables in conjoint measurement*. 32nd Annual Meeting of the Society for Mathematical Psychology, Santa Cruz, California (poster).
46. Karabatsos, G. (August, 1999). *Axiomatic measurement theory as a basis for model selection in item-response theory*. 32nd Annual Meeting of the Society for Mathematical Psychology, Santa Cruz, California.
47. Lloyd, S., & Karabatsos, G. (August, 1999). *Correcting contaminated person measures by means of a three-factor conjoint measurement procedure*. 32nd Annual Meeting of the Society for Mathematical Psychology, Santa Cruz, CA (poster).
48. Karabatsos, G. (December, 1999). *Tests of Rasch model fit based on paired-comparisons*. Midwest Objective Measurement Seminar, Chicago.
49. Karabatsos, G. (April, 1999). *Rasch versus the 2 parameter and 3 parameter logistic models in conjoint measurement theory*. American Educational Research Association Annual Meeting, Montreal, Canada.
50. Karabatsos, G. (June, 1998). *Rasch versus the 2 parameter and 3 parameter logistic models in axiomatic measurement theory*. Midwest Objective Measurement Seminar, Chicago.
51. Bontempo, B., Marks, C., & Karabatsos, G. (April, 1998). *A meta-analytical assessment of empirical differences in standard setting procedures*. Paper presented at the American Educational Research Association Annual Meeting, San Diego.

CONFERENCE PRESENTATIONS IN SOCIAL AND CLINICAL SCIENCES

1. Talbott, E., Karabatsos, G., Cushing, L.S., and Van Acker, R. (2012). *Classroom contexts and individual influences: Patterns of behavioral outcomes and social interactions of youth with and without disabilities in grades K-12*. Pacific Coast Research Conference, Coronado, California, February 3.
2. Talbott, B., Cushing, L.S., Karabatsos, G., and Van Acker, R. (2011). *Keeping Good Company in the Classroom: Academic and Social Benefits of Friendship for Students with and without Disabilities*. Pacific Coast Research Conference, Coronado, California.
3. Karabatsos, G. (2010). *A Bayesian nonparametric regression model, with application to the analysis of literacy achievement*. Second Annual Research Day Conference, University of Illinois-Chicago, College of Education.
4. Tatum, A., and Karabatsos, G. (2010). *A Survey Study of Texts Adolescents Find Meaningful and Significant: A Look Toward Resilience*. Second Annual Research Day Conference, University of Illinois-Chicago.
5. Karabatsos, G., and Walker, S.G. (2010). *A Bayesian Semiparametric Multivariate Causal Model, With Automatic Covariate Selection and For Possibly-Nonignorable Missing Data*. Paper presented at the Conference of the Society For Research on Educational Effectiveness, Washington, D.C.
6. Talbott, E., and Karabatsos, G. (2010). *The Contribution of Behavioral Genetics to the Development of Antisocial Behavior: A Meta-analysis of Twin Studies*. Pacific Coast Research Conference, Coronado, California.
7. Karabatsos, G. (2009, August). *The causal effects of poor neighborhood exposure on academic achievement, in Chicago Public Schools*. Research Day, College of Education, University of Illinois-Chicago.
8. Lin, H.-W., Pickard, A.S., Karabatsos, G., Mahady, G.B., Crawford, S., Popovich, N.G. (2008). *Validating a Survey Instrument Using Nonparametric Item Response Theory Application of Kernel Regression*. 3rd Asia-Pacific ISPOR, Seoul, South Korea.
9. Lin, H.-W., Pickard, A.S., Karabatsos, G., Mahady, G.B., Crawford, S.Y. (2008). *The impact of pharmacists' knowledge, attitude and self-efficacy toward their performance of patient counseling on herbs and dietary supplements*. Midwest Social & Administrative Pharmacy Conference. University of Illinois-Chicago.
10. Lin, H.-W., Pickard, A.S., Karabatsos, G., Mahady, G.B., Crawford, S., Popovich, N.G. (2008). *Development and validation of a measure to assess general and herbal and dietary supplement-specific patient counseling by pharmacists*. Midwest Social & Administrative Pharmacy Conference, University of Illinois-Chicago.
11. Lin, H.-W., Pickard, A.S., Karabatsos, G., Mahady, G.B., Crawford, S., Popovich, N.G. (2008). *Validating a Survey Instrument Using Nonparametric Item Response Theory Application of Kernel Regression*. Presentation for the annual conference of the International Society for Pharmacoeconomics and Outcomes Research, Toronto, Ontario, Canada, May 3-
12. Garza, P., Karabatsos, G., & Radinsky, J. (December, 2005). *Ethnicity and teacher placement*. Midwest Objective Measurement Seminar, Rehabilitation Institute of Chicago.
13. Hendrix, C.C., Sakauye, K., & Karabatsos, G. (November, 2003). *Observable indicators of elderly depression*. Annual Meeting of the The Gerontological Society of America.
14. Karabatsos, G., DeBlieux, P., & Dicarolo, R. (April, 2000). *Using FACETS to measure the communication skills of medical students in acute-care settings*. International Outcomes Measurement Conference 3, Chicago, Illinois.

15. Fisher, W.P., & Karabatsos, G. (April, 2000). *Making the case for fundamental measurement with MEPS/CAHPS quality of care data: From concrete counts of survey responses to abstract measures of health care quality*. International Outcomes Measurement Conference 3, Chicago, Illinois.
16. Karabatsos, G., & Fisher, W.P. (January, 2000). *Procedures for studying quality of care survey data with a fundamental measurement model*. Annual Meeting of the American Public Health Association, Section on Statistics, Boston, Massachusetts.
17. Karabatsos, G., & Fisher, W.P. (January, 2000). *Fundamental Measurement of quality of care: Results from the MEPS and CAHPS quality of care calibration results*. Annual Meeting of the American Public Health Association, Section on Statistics, Boston, Massachusetts.
18. Fisher, W.P., & Karabatsos, G. (January, 2000). *Quality of care metrology: New possibilities for generalized quantification*. Annual Meeting of the American Public Health Association, Section on Statistics, Boston, Massachusetts.
19. Fisher, W.P., & Karabatsos, G. (January, 2000). *Obtaining fundamental measurement: From concrete, ordinal counts to abstract, interval measures*. Annual Meeting of the American Public Health Association, Section on Statistics, Boston, Massachusetts.
20. Jeansonne, G., Levitzky, M., & Karabatsos, G. (April, 2000). *Rasch analysis of Aesculapian Society medical school course evaluations*. International Objective Measurement Workshop 10, New Orleans, Louisiana (poster).
21. Rayford, W.A., Cheli, C.D., Kokatner, M., Karabatsos, G., Sullivan, G.W., Goodman, J., Ward, M., Pollard, S., & Sartor, O. (2000). *Age-specific PSA, complexed CPS (cPSA) and percent CPSA levels in a screening population of African-American and Caucasian men: A Louisiana experience*. Annual Meeting of the American Urological Association, Atlanta.
22. Birke, J., Patout, C., Fisher, W.P., Williams, D., & Karabatsos, G. (1999). *Assessing the quality of physical functioning measurement in a diabetes foot clinic*. Annual Meeting of the Association for Health Services Research, Chicago, IL (poster).
23. Karabatsos, G. (November, 1998). *What is and what isn't outcome measurement*. South-Central Objective Measurement Seminar, New Orleans.
24. Karabatsos, G. (December, 1997). *Diagnostic measurement*. Midwest Objective Measurement Seminar, Chicago.
25. Karabatsos, G. (1997). *Rapist typology*. Midwest Objective Measurement Seminar, Chicago.
26. Karabatsos, G. (December, 1997). *The measurement and understanding of sexual victimization and perpetration*. Midwest Objective Measurement Seminar, Chicago.

GRANT RESEARCH AS PRINCIPAL INVESTIGATOR (PI) OR CO-PI

GRANT #5

Title: Advances and Applications in Bayesian Density Regression
Principal Investigators: George Karabatsos (Lead PI)
Co-PIs: Stephen G. Walker, Victoria Chou, Elizabeth Talbott,
Alfred Tatum
Agency: National Science Foundation
Program of Methodology, Measurement, and Statistics.
Amount: \$280,000.
Grant Number: SES-1156372
Funding Duration: 2 years, from 5/15/12 to 5/14/14 (estimated).
Research Site: University of Illinois-Chicago.

GRANT #4

Title: Content Learning and Identity Construction: African American
Students in Urban Elementary Schools.
Principal Investigators: Maria Varelas (Lead PI),
Co-PIs: Danny Martin, Justine Kane, George Karabatsos.
Funding Agency: University of Illinois-Chicago: Areas of Excellence Awards.
Amount: \$164,948.
Funding Duration: March 1, 2012 to February 29, 2013.
Research Site: University of Illinois-Chicago.

GRANT #3

Principal Investigator: George Karabatsos
Collaborative Research with Jay Myung of Ohio State University.
Title: Bayesian Approaches for Testing Axioms of Measurement
Agency: National Science Foundation
Program of Methodology, Measurement, and Statistics.
Amount: \$280,000.
Grant Number: SES-0242030
Funding Duration: 3 years, from 5/1/03 to 4/31/06.
Research Site: University of Illinois-Chicago.

GRANT #2

Principal Investigator: George Karabatsos
Title: A Comparison Of Methods That Evaluate The Quality Of An
Examinee's Test Responses
Agency: Spencer Foundation
Amount: \$24,000
Grant Number: SG200100020
Funding Period: June 1, 2000 to June 1, 2001.
Research Site: Louisiana State University Health Sciences Center, New Orleans

GRANT #1

Principal Investigators: William P. Fisher, and George Karabatsos (Co-PI)
Title: Fundamental Measurement for Health Care Services Research
Agency: Agency for Health Care and Policy Research
Amount: \$50,000
Grant Number: R01 HS10186 01
Funding period: July 1, 1999 to February 1, 2000.
Research Site: Louisiana State University Health Sciences Center, New Orleans
Grant review: Scored 161, in the top 0.9 percentile.

COLLABORATIVE GRANT RESEARCH (with PI name listed)

Rimmer, James (2011-2013). Center for Disease Control (CDC) and Prevention. Karabatsos' role: Statistician.

Tatum, A. (2010). *Teens and texts: A large-scale survey study*. Carnegie Corporation grant. Karabatsos is statistical consultant for 2 weeks. Karabatsos' role: Statistical consultant.

AWARDS

Best Applied Statistics paper Award, American Statistical Association (2009).

The award was won for the following publication:

Gibbons, R.D., Segawa, E., Karabatsos, G., Amatya, A.K., Brown, C.H., Kapur, K., Marcus, S., Bhaumik, D.K., Hur, K., & Mann, J.J. (2008). Random-effect Poisson Regression Analysis of Adverse Event Reports: The Relationship Between Antidepressants and Suicide. *Statistics In Medicine*, 27, 1814-1833.

New Investigator Award (\$250), Society for Mathematical Psychology (2002).

The award was won for the following publication:

Karabatsos, G. (2001). The Rasch model, additive conjoint measurement, and new models of probabilistic measurement theory. *Journal of Applied Measurement*, 2, 389-423.

Sponsored Junior Scholar, Random Utility 2000 conference

Conference and workshop on random utility theory and probabilistic measurement theory. Held at Duke University, August, 2000.

JOURNAL REVIEW OF MANUSCRIPTS, GRANT PROPOSALS, AND BOOKS:

- Associate Editor, *Psychometrika*, August 2005 to present.
- Editorial board member, *Journal of Applied Measurement*, 2001-present.
- Member of the Grant Proposal Review Panel, Institute of Educational Sciences (U.S., Dept. of Education), Program in Teacher Quality – Reading and Writing (since February 2008).

- Member of the Grant Proposal Review Panel, National Science Foundation, Program of Methodology, Measurement, and Statistics. (May 2005).
- I have served as an occasional manuscript reviewer for the following journals: *Applied Psychological Measurement*, *Behavior Research Methods*, *Biometrika*, *British Journal of Mathematical and Statistical Psychology*, *Developmental Psychology*, *Educational and Psychological Measurement*, *Journal of the American Statistical Association*, *Journal of Applied Measurement*, *Journal of Decision Making*, *Journal of Educational Measurement*, *Journal of Mathematical Psychology*, *Journal of Neuroscience Methods*, *Journal of Nonparametric Statistics*, *Journal of Research on Educational Effectiveness*, *Perspectives on Psychological Science*, *Proceedings of the National Academy of Sciences*, *Psychological Methods*, *Psychological Reports: Perceptual and Motor Skills*, *Psychometrika*, *Psychonomic Bulletin and Review*, *Statistics and Computing*, *Statistics In Medicine*, *Statistica Sinica*, *Sociological Methods and Research*, *Statistics and Computing*, *Test*.
- As Member of the Grant Proposal Review Panel, I reviewed 15 grant proposals for the National Science Foundation, Program of Methodology, Measurement, and Statistics.
- As an ad-hoc reviewer, I have reviewed more than 7 grant proposals for the National Science Foundation, Program of Methodology, Measurement, and Statistics, and I have reviewed a grant proposal for the National Security Agency Mathematical Sciences Grant Program.
- I have reviewed book proposals on Bayesian statistical analysis.

SPECIAL CONTRIBUTIONS IN CONFERENCES:

- Chaired a Session for the eighth Workshop on Bayesian Nonparametrics, Veracruz, Mexico, June 2011. Invited to organize and chair a session “Recent Developments in Bayesian Nonparametric Order Constrained Inference,” for the 2006 Psychometric Society Meeting. The session participants are William Batchelder (University of California-Irvine), Geoff Iverson (University of California-Irvine), George Karabatsos, Jay Myung (The Ohio State University), and Stephen Walker (University of Kent, U.K.).
- Session Chair, “Test Theory”, 37th Annual Meeting of the Society for Mathematical Psychology, University of Michigan, July, 2004.
- Session Chair, “Measurement and Statistics”, 36th Annual Meeting of the Society for Mathematical Psychology, Weber State University, August, 2003.
- Session Chair for “Rasch Model Fit Analysis.” International Objective Measurement Workshop, LSU Health Sciences Center, 2002.
- Program Chair, Rasch Measurement Special Interest Group, American Educational Research Association, 2000-2003.
- Session Discussant for “Cognitive Science I,” on Brian Junker’s paper presentation entitled “Item response modeling: a toolbox for educational and psychological measurement.” International Society for Bayesian Analysis conference, Laguna Beach, California, 2001.
- Session Discussant for “Parameter Estimation in Item Response Theory and Item Response Models,” Annual Meeting of the American Educational Research Association, New Orleans, April 2000.
- Paper proposal reviewer, American Educational Research Association, Division on Methodology and Statistics (Division D), 1999, 2001.

- Paper proposal reviewer, Rasch Measurement Special Interest Group, American Educational Research Association, 1999-2003.
- Session Chair, “Choice, Measurement, and Statistics,” 32nd Annual Meeting of the Society for Mathematical Psychology, Santa Cruz, California, July, 1999.

PROFESSIONAL MEMBERSHIPS:

- American Statistical Association, (since 2003).
- International Society for Bayesian Analysis (since 2000).
- Institute for Mathematical Statistics (since 2004).
- Institute for Objective Measurement, 1996-1999.
- Measurement & Research Methodology Division, American Educational Research Association, 1998-2005.
- MESA Psychometric Laboratory, The University of Chicago, 1996-1998.
- Psychometric Society (since 2005).
- Rasch Measurement SIG, American Educational Research Association, 1996-2003.
- Society for Mathematical Psychology, 1998 to 2006.
- Society for Research on Educational Effectiveness (since 2009).

UNIVERSITY COMMITTEE MEMBERSHIPS:

- Executive Committee Member, Department of Educational Psychology (since August 2009)
- Co-Program Coordinator, Department of Educational Psychology (since January 2008)
- Interim Program Coordinator, Department of Educational Psychology (Spring 2008)
- Doctoral Steering Committee (since Spring 2008)
- Educational Program and Policy Committee (Spring 2007)
- Honors and Teaching Excellence Committee (since Spring 2003).
- Curriculum Evaluation Committee (Louisiana State University).
- Curriculum Reform Committee (Louisiana State University).
- Advanced Adult Learning Center Technical Committee (Louisiana State University).

TEACHING EXPERIENCE

<u>Courses Taught at University of Illinois-Chicago</u>	<u>Years Offered</u>	<u>Level</u>
EPSY506 Item Response Theory	Since 2002	Masters/Ph.D.
EPSY 510 Theory of Statistics	Since 2008	Masters/Ph.D.
EPSY 512 Hierarchical Linear Modeling	Since 2005	Masters/Ph.D.
EPSY 514 Nonparametric Modeling	Since 2008	Masters/Ph.D.
EPSY 546 Educational Measurement	Since 2002	Masters/Ph.D.
EPSY 583 Multivariate Methods	2002-2003	Masters/Ph.D.

Courses Taught at LSU Health Sciences Center

Markov Chain Monte Carlo Statistical Inference.	2001	Masters/Ph.D.
Categorical data analysis.	2000	Masters/Ph.D.
Multivariate Methods.	2000	Masters/Ph.D.
Introduction to Biostatistics.	1998-2002	Undergraduate

Educational Psychology Students who completed the Ph.D. under Karabatsos' supervision:

- Dobria, Lidia (2011). "Longitudinal Rater Modeling with Splines." Co-advising with Carol Myford.
- McCoy, Keith (Ph.D., 2010). "Impact of Item Parameter Drift On Examinee Ability Measures In A Computer Adaptive Environment."
- Muckle, Timothy (Ph.D., 2009). "A Semi-Parametric Bayesian Mixture Modeling Approach for the Analysis of Judge-Mediated Data."
- Liu, Xin (Ph.D., 2006). "A Bayesian Nonparametric Approach to Testing Essential Unidimensionality in Item Response Theory."
- Becker, Kirk (Ph.D., 2007). "A Hierarchical Bayesian Model for the Classification of Developmental Groups Based on Complex Constructed Response Data."

Educational Psychology Ph.D. Students who are currently under Karabatsos' supervision:

- Fujimoto, Ken (post-proposal stage for the Ph.D.). Topic: A Dependent Dirichlet Process model of Rating Category Usage.
- Mattson, Todd (pre-proposal stage for the Ph.D.). Topic: The efficacy of computerized statistics instruction.
- Milligan, Shannon (pre-proposal stage for the Ph.D.; currently completing coursework).
- Oxman, Steven (pre-proposal stage for the Ph.D.; currently completing coursework).
- Swanlund, Andrew (proposal stage for the Ph.D.). Topic: Bias modeling in the analysis of judge ratings.

Past Ph.D. and Master's Committee Memberships, not under Karabatsos' supervision:

University of Illinois-Chicago, Number of Ph.D. committees served by Department:

Criminal Justice (1), Economics (1), Educational Psychology (3), Epidemiology and Biostatistics (2), Information and Decision Sciences (1), Institute on Disability and Human Development (2), Institute for Health Research & Policy (1), Pharmacy Administration (1), Psychology (2 Ph.D., 1 M.A.), Public Health (1), Special Education (2), Marketing (1), Nursing Science (1).

LSU Health Sciences Center, Number of Ph.D. committees served by Department:

Biochemistry (1), Genetics (2), Nursing (1), Biostatistics (1 M.A.).

University of Perth, Australia: Served on one Ph.D. committee (outside reader) for the Department of Psychology.

PSYCHOMETRIC AND STATISTICAL SOFTWARE EXPERIENCE

MATLAB, R, S-Plus, SPSS, SAS, SYSTAT, StatExact, Resampling Stats, EQS, HLM, WinBugs, CDAS, WINSTEPS, FACETS, MULTILOG, PARDSIM, XCALIBRE, PARELLA (psychometric) *GENERAL PROCESSING TREE MODELS* (cognitive modeling), among others.

STATISTICAL PROGRAMS DEVELOPED (SELECTED)

As a byproduct of several manuscripts, I have developed many computer programs for data analysis, written in either R or MATLAB code. They include programs for: Bayesian Cognitive Multinomial Processing Tree models* (1999), Bayesian models for test theory without an answer key* (cultural consensus theory) (2001), Bayesian isotonic regression for IRT* (2003); Kernel regression approaches to Item Response Theory* (2006); Bayesian nonparametric approaches to the single index model via splines (2007); Bayesian nonparametric mixing of random utility models (2008); Programs for equating using various methods (2009); a program for Bayesian nonparametric density regression (2010).

Programs that have U.S. copyright are indicated by an asterisk (*).