

Tyler H. McCormick

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Education

- Ph.D. in Statistics (expected May 2011) *Columbia University*
 - Dissertation: Latent space models for networks using Aggregated Relational Data
- M. Phil. in Statistics (2010) *Columbia University*
 - Oral exam committee: Tian Zheng, Andrew Gelman, David Madigan
- M.A. in Statistics (2008) *Columbia University*
- M.S. in Statistics (2008) *University of Connecticut*
- B.A. in Child Policy (Sociology) (2005) *Duke University*

Publications

- McCormick, T. H., Salganik, M. J. and Zheng, T. (2010). How many people do you know?: Efficiently estimating personal network size. *Journal of the American Statistical Association*, 105, 59-70.
- Diprete, T. D., Gelman, A., McCormick, T. H., Teitler, J., and Zheng, T. (2010). Segregation in social networks based on acquaintanceship and trust. *To Appear, American Journal of Sociology*.
- McCormick, T. H. and Zheng, T. (2010). A latent space representation of overdispersed relative propensity in “How many X’s do you know?” data. Conference Proceedings. Joint Statistical Meetings: Vancouver, B.C.
- McCormick, T. H. and Zheng, T. (2009). Towards a unified framework for inference in Aggregated Relational Data. Conference Proceedings. Joint Statistical Meetings: Washington, D.C.
- McCormick, T. H., Ruf, J., Moussa, A., Diprete, T. D., Gelman, A., Teitler, J., and Zheng, T. (2009). Comparing two methods for predicting opinions using social structure. Conference Proceedings. Joint Statistical Meetings: Washington, D.C.
- McCormick, T. H. and Zheng, T. (2007). Adjusting for recall bias in “How many X’s do you know?” surveys. Conference Proceedings. Joint Statistical Meetings: Salt Lake City, Utah.

Papers under review

- McCormick, T. H., Raftery, A. E., Madigan, D., and Burd, R. Dynamic logistic regression and dynamic model averaging for binary classification. Under revision, *Biometrics*.
- McCormick, T. H., and Zheng, T. Latent demographic profile estimation in at-risk populations.
- McCormick, T. H., Rudin, C., and Madigan, D. A hierarchical model for association rule mining of sequential events: an approach to automated medical symptom prediction.
- McCormick, T. H., Ruf, J., Moussa, A., Diprete, T. D., Gelman, A., Teitler, J., and Zheng, T. A practical guide to measuring social structure using indirectly observed network data.

Fellowships

- Google Ph.D. Fellowship in Statistics (2010-present)
- Graduate Fellowship, Columbia University (2007-2010)
- Graduate Assistantship, University of Connecticut (2005-2007)
- Robertson Scholar, Duke University (<http://www.robertsonscholars.org>) (2001-2005)

Honors and Awards

- Young academic award, CRiSM workshop on Model Uncertainty, Warwick, U.K. (2010)
- Student paper award, Statistical Learning and Data Mining Section, ASA (2010)
- Columbia Applied Statistics Center summer research grant (2010)
- NSF travel award, International Society for Bayesian Analysis World Meetings (2010)
- Howard Levene Teaching Award, Dept. of Statistics, Columbia University (2009)
- JSM Poster Award, Survey Research Methods Section, ASA (2009)
- Columbia Population Research Center Seed Grant (2009)
- Laha Award, Institute of Mathematical Statistics (2008)
- Outstanding Student Paper (Methodology), Intl. Indian Statistical Assn. (2008)
- Graduation with Departmental Distinction, Duke University (2005)
- Phi Beta Kappa*, Duke University (2005)
- Magna Cum Laude*, Duke University (2005)
- Regional Scholar, Coca-Cola Scholars Program (2001-2005)

Invited Presentations

- “Latent structure models for social networks using aggregated relational data,” Invited poster, Joint Statistical Meetings, Vancouver 2010
- “How many people do you know?: Efficiently estimating personal network size,” Laha Award Presentation, 7th World Congress in Probability and Statistics, 2008
- “Efficient estimation of personal network size,” Annual Methodology Conference, American Sociological Association, 2008
- “Bayesian modeling for a Generalized Social Relations Model,” American Psychological Association Conference on Dyadic Data, 2007
- “Markov Chain Monte-Carlo estimation of the p^* Method for social networks,” Annual Methodology Conference, American Sociological Association, 2006

Contributed Presentations

- “Dynamic model averaging and dynamic logistic regression,” Joint Statistical Meetings-Vancouver, 2010
- “Extracting network features through indirectly observed network data,” Statistical Modeling and Inference for Networks Conference, SuSTaIn, University of Bristol 2010 (awarded travel support from conference committee)
- “Latent structure models for social networks using Aggregated Relational Data,” 2010 ISBA World Meetings, Benidorm, Spain (awarded travel support from conference committee)
- “Dynamic model averaging and dynamic logistic regression,” Joint Statistical Meetings-Washington, D.C. 2009
- “Latent structure models for social networks using Aggregated Relational Data,” Statistical Methods for the Analysis of Network Data Meetings, University College Dublin 2009 (awarded travel support from conference committee)
- “How many people do you know?: Efficiently estimating personal network size,” International Chinese Statistics Association Conference 2008
- “Estimating network size using conventional surveys,” International Indian Statistics Association Conference 2008
- “Estimating social network size,” Joint Statistical Meetings-Salt Lake City 2007
- “On the distribution of personal network size,” New England Statistics Symposium 2007
- “Race and friendship in middle childhood: Analysis using the p^* Method for social networks,” Thesis Presentation for Graduation with Distinction, Duke University 2005 (supervised by Jerry Reiter)

Poster Presentations

“Latent structure models for social networks using aggregated relational data,” Isaac Newton Institute, Cambridge 2010 (awarded travel support from conference committee)

“Dynamic model averaging and dynamic logistic regression,” CRiSM Model Uncertainty Workshop, University of Warwick 2010

“Latent structure models for social networks using aggregated relational data,” Joint Statistical Meetings-Washington, D.C. 2009 (poster award winner)

“Tell me who you know, I’ll tell you who you are: using social structure to predict opinions,” Joint Statistical Meetings-Washington, D.C. 2009

Teaching

Instructor, Introduction to Statistics

Columbia University—Fall 2008, Spring 2009

University of Connecticut—Spring 2006, Fall 2006 (2 sections)

Teaching assistant

Graduate—Applied statistics, Spring 2010; Data mining, Fall 2009; Linear Models, Fall 2007

Undergraduate—Introduction to statistics, Spring 2003-Spring 2005 at Duke University and Spring 2008 at Columbia University

Professional Involvement

Reviewer, AISTATS 2010

Chair, Invited session, Latent space models for networks, JSM 2010

Seminar chair, Department of Statistics Student Seminar, Columbia University 2009-2010

Chair, Contributed session, Statistical Learning and Data Mining Section, JSM 2009

Organizing Committee, Minghui Yu Memorial Research Day, Columbia University 2009

New Faculty Recruitment Committee Member, Columbia University 2009

Organizing Committee, Conference on Doctoral Careers in Statistics, Columbia University, April 2008

New Faculty Recruitment Committee Member, Columbia University 2008

Organizing Committee, Mini-Symposium on Statistical Consulting, Columbia University, January 2008

Chair, Invited session “Recent Contributions to Nonparametric Methodologies in Biomedical Research” organized by Tian Zheng, International Chinese Statistical Association Symposium 2006

Professional Societies

- Member, American Statistical Association
- Member, International Society for Bayesian Analysis
- Member, Institute of Mathematical Statistics
- Member, American Sociological Association