Wei Wang

CONTACT INFORMATION

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New York, NY 10027

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EDUCATION

Columbia University, New York, United States

Ph.D., Statistics — September 2009 – present

- Co-adviser: Andrew Gelman
- Co-adviser: Michael Sobel
- Expected graduation date: August 2014

University of Science and Technology of China, Hefei, Anhui, China

B.S., Statistics — September 2005 – June 2009

- Rank 2/63

RESEARCH INTERESTS

- Bayesian Hierarchical Models, Computational Social Science, Causal Inference, Survey Methodology, Missing Data Imputation

PUBLISHED PAPERS

- Wei Wang, Shard Goel, David Rothschild and Andrew Gelman. 2014." Forecasting Elections with Non-Representative Polls". *International Journal of Forecasting*. Forthcoming.
- Aria Toivgoo, Wei Wang, Marion Riedel and Susan Witte. 2013. "Reducing Risk Behaviors linked to Non Communicable Diseases in Mongolia: A randomized controlled trial". *American Journal of Public Health*. Vol. 103, No. 9, pp 1666-1674.

SUBMITTED PAPERS

- Michael Sobel, David Madigan and Wei Wang. Meta-Analysis: A Causal Framework, with Application to Randomized Studies of Vioxx.
- Wei Wang and Andrew Gelman. A Problem with the Use of Cross-Validation for Selecting among Multilevel Models.

WORK IN PROGRESS

- "Bayesian Non-parametric Modeling of Causal Effect in Meta-Analysis"
- "Multiple Imputation Model for Time-Series Cross-Sectional Social Survey Data". Collaborators: Ben Goodrich, Jonathan Kropko, Andrew Gelman.

INVITED TALKS

"Challenges with Cross Validation for Comparing Structured Models", Columbia Machine Learning Reading Group, August 2012.

AWARDS

- Best Poster Award (3 out of 25), The 8th International R Users Conference, June 2012 (for "Multilevel Regression and Poststratification of Survey Data").
- Columbia University Department of Statistics Minghui Yu Teaching Assistant Award, 2011.

COMPUTING SKILLS

- *Programming Languages*: Proficient in R; Familiar with C++, Python, Matlab.
- *Tools & Applications*: Unix Command-line Tools, Emacs, Git, Hadoop.

SOFTWARE AUTHORSHIP

- MI: an R package implementing multiple imputation through iterative equations. With Ben Goodrich, Jonathan Kropoko, Andrew Gelman, Jennifer Hill and Yajuan Si.
- mrp: an R package for Multilevel Regression and Poststratification of survey data. With Michael Malecki, Andrew Gelman, Daniel Lee and Jiqiang Guo.

Work Experience

- **Microsoft Research**, New York City, United States

  Research Intern May – August 2013

  Applied novel Bayesian hierarchical modeling to a highly biased vote intention survey placed in the Xbox gaming platform during the 2012 election campaign and obtained highly accurate state-by-state election outcome prediction that is equivalent to the state-of-the-art results from established sources.

- **World Bank**, Washington DC, United States

  Short-term Consultant at the Research Unit, Poverty and Inequality Group August 2011

  Built the statistical back-end of the World Bank Comparative Living Standards Project using R. (http://iresearch.worldbank.org/clsp/index.aspx#).

- **International Finance Corporation** (World Bank Group), Washington DC, United States

  Short-term Consultant, Development Outcome Tracking Group May – July 2011

  Worked on building predictive models for outcomes of development projects financed by the International Finance Corporation.

Teaching Experience

- **Graduate Instructor**
  W1211 Introduction to Statistics with Calculus, Columbia University, Summer 2012/Fall 2012
  A comprehensive introductory statistics course for undergraduate students.

- **Teaching Assistant**
  Various graduate and undergraduate courses, including
  Statistical Inference, Data Mining,
  Applied Data Science, Multilevel Models
  Linear Regression, Generalized Linear Models.

Professional Affiliation

American Statistical Association

Institute of Mathematical Statistics

International Society of Baysian Analysis