

Ryan Miller

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| CONTACT INFORMATION | Noyce 2217, 1116 8 th Avenue, Grinnell, IA 50112-1690 | phone: (815) 307-2803 email: millerry@grinnell.edu website: remiller1450.github.io |
| EDUCATION | University of Iowa , Iowa City, IA Ph.D., Biostatistics, August 2018 <ul style="list-style-type: none">Thesis: <i>Marginal False Discovery Rate Approaches to Inference on Penalized Likelihood Models</i>Advisor: Patrick Breheny, Ph.D M.S., Biostatistics, May 2015 <ul style="list-style-type: none">Preceptorship Topic: <i>Analyzing the Geographic Dispersion of Accidents Involving Animal Strikes in Iowa using a Bayesian Spatio-temporal Model</i>Advisor: Jake Oleson, Ph.D Augustana College , Rock Island, IL B.A., Mathematics and Mathematics Education (Double Major), May 2011 <ul style="list-style-type: none">Graduated <i>Cum Laude</i>Advisor: Stacey Rodman, Ph.D | |
| RESEARCH INTERESTS | High-dimesional data analysis, penalized likelihood models, false discovery rate approaches to multiple testing, survival data analysis, causal inference, statistics in sports | |
| RESEARCH EXPERIENCE | Research Assistant January 2017 to August 2018 Iowa Public Policy Center, University of Iowa Supervisor: Elizabeth Momany, Ph.D Role: Data analysis as part of the State Innovation Model (SIM) for Iowa healthcare Research Assistant August 2014 to January 2017 Iowa Public Policy Center, University of Iowa Supervisor: Michelle Reyes, M.S. Role: Analyses and data management involving the Iowa Department of Transportation (IDOT) crash records | |
| CONSULTING EXPERIENCE | Consultant June 2017 to present National Advanced Driving Simulator Organization, University of Iowa Supervisor: Michelle Reyes, M.S. Role: Statistical support on projects involving teen driving research | |
| PUBLICATIONS | <ol style="list-style-type: none">Miller, R., and Breheny, P “Marginal False Discovery Rate Control for Penalized Likelihood Methods” (In submission, link: https://arxiv.org/abs/1710.11459)Miller, R., and Breheny, P “Local False Discovery Rates for lasso Regression.” (In preparation) | |

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| TEACHING EXPERIENCE | Assistant Professor | Fall 2018 - Present |
| | MAT209 - Applied Statistics Department of Mathematics and Statistics, Grinnell College | |
| | Instructor | Summer 2014 |
| | BIOS 4120 - Introduction to Biostatistics Department of Biostatistics, University of Iowa | |
| | Teaching Assistant | Fall 2013, Spring 2014 |
| | BIOS 4120 - Introduction to Biostatistics Department of Biostatistics, University of Iowa | |
| | High School Teacher | 2011-2012 |
| | Algebra I, Algebra II with Trig, Advanced Algebra, Calculus I Pawnee High School, Pawnee IL | |
| SKILLS | Computer Software: | |
| | <ul style="list-style-type: none"> • R, SAS, Latex | |
| | Statistical Skills: | |
| | <ul style="list-style-type: none"> • Parametric and non-parametric hypothesis testing, linear regression, GLMs, Cox proportional hazards models, random and mixed effects models, propensity score matching, multiple imputation, sample size and power calculations, bayesian hierarchical models, high-dimensional data analysis, machine learning, data visualization | |
| HONORS AND RECOGNITIONS | <ul style="list-style-type: none"> • William R. Clarke Graduate Teaching Assistant award recipient 2018 • University of Iowa Outstanding Teaching Assistant nominee 2013-14 • Elected into Pi Mu Epsilon honor society, Augustana College chapter 2010 • Four year letterman in Cross Country, Track at Augustana College 2007-2011 | |
| | REFERENCES | |
| | Patrick Breheny | |
| | Associate Professor | Phone: (319) 384-1584 |
| | Department of Biostatistics | E-mail: patrick-breheny@uiowa.edu |
| | University of Iowa | http://myweb.uiowa.edu/pbreheny/ |
| | Joe Cavanaugh | |
| | Department Executive Officer, Professor | Phone: (319) 384-1602 |
| | Department of Biostatistics | E-mail: joe-cavanaugh@uiowa.edu |
| | University of Iowa | http://myweb.uiowa.edu/cavaaugh/ |
| | Michelle Reyes | |
| | Research Associate | Phone: (319) 335-9563 |
| | National Advanced Driving Simulator | E-mail: michelle-reyes@uiowa.edu |
| | University of Iowa | |