Matthew C. Galloway

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https://mgallow.github.io/

Education

University of Minnesota, Minneapolis, Minnesota
School of Statistics, Doctorate of Philosophy (Ph.D.)

- Research interests include: statistical machine learning, multivariate analysis, precision matrix estimation, sufficient dimension reduction, and kernel methods.

University of St. Thomas (Liberal Arts), St. Paul, Minnesota Graduation: May 2015
Majors: **B.S. Statistics, B.S. Actuarial Science,** Renaissance Minor
B.A. Mathematics (concentration in Applied Mathematics)

Actuarial Exams Passed: P/1; FM/2; MFE/3 (fulfilled all VEE requirements)

Research

Omega - A complete R package for precision matrix estimation

- Estimates a penalized precision matrix via various methods such as ADMM and the glasso algorithm. Written in C++. Available on Github: MGallow/Omega.

Envelope Methods

- Envelopes are nascent methodology aimed at increasing efficiency in the multivariate estimation and prediction setting. Potential for huge efficiency gains in applications like computer vision, tensor regression.

Default Analysis of Mortgage Portfolios

- Used MCMC to model time-to-default of subprime mortgages in 2002-2010. Presented at MCMSki Conference, Chamonix, France, January 2014. *Paper accepted in MASA.*

Work Experience

Research Assistant June 2018 - Present
University of Minnesota - School of Statistics

- My current research is broadly related to efficient precision matrix estimation under the supervision of Adam J. Rothman, Ph.D.

Statistical Consultant June 2017 - Present
Institute for Research on Statistics and its Applications (IRSA)

- Advise clients, including professors and faculty at the university, on the proper statistical analysis related to their research.

Teaching Assistant Sept. 2015 - Present
University of Minnesota - School of Statistics

- STAT 1001, STAT 3021, STAT 3032, STAT 4893W, STAT 8052

Tutor June 2017 - Present
University of Minnesota - Twin Cities

- STAT 3022, MBA 6120

Awards

Lynn Lin Fellowship May 2017
Allianz Life Endowment Scholarship April 2014
Young Investigator Travel Grant Jan. 2014
International Education Scholarship Jan. 2014