Matthew C. Galloway

gall0441@umn.edu
mattxgalloway.com

Education

University of Minnesota, Minneapolis, Minnesota — Sept. 2015 - Present
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

SCPME - R package

- An implementation of the methods described in "Shrinking Characteristics of Precision Matrix Estimators" by Aaron J. Molstad, Ph.D and Adam J. Rothman, Ph.D. Available on CRAN or Github (MGallow/SCPME).

ADMMsigma - R package for precision matrix estimation

- Estimates a penalized precision matrix via ADMM algorithm. Written in C++. Available on CRAN or Github (MGallow/ADMMsigma).

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

Graduate Instructor — June 2018 - Present
University of Minnesota - School of Statistics

- STAT 3011: *Introduction to Statistical Analysis*

IRSA Statistical Consultant — Aug. 2017 - Jan. 2018
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.

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.

University of St. Thomas

- Developed exercises as supporting materials for *Introduction to Bayesian Estimation and Copula Models of Dependence.*

Actuarial Intern — May 2014 - Aug. 2014
Thrivent Financial

- Automated Thrivent's existing master files and performed sensitivity analysis for a proposed life product using ALFA software.