

IAN TAYLOR

IAN@IANTAYLOR.ORG

EDUCATION

- 2017–Present **M.S./Ph.D. Statistics**, *Colorado State University*, Fort Collins, CO.
M.S. attained December 2019
Ph.D. Advisors: Bailey K. Fosdick and Andee Kaplan
Research in network statistics, record linkage, and Bayesian models
- 2009–2013 **B.S. Mathematical Sciences**, *Clemson University*, Clemson, SC.
Concentration: Computer Science
- Magna Cum Laude
 - Clemson University Honors College – General Honors
 - Phi Beta Kappa
 - National Society of Collegiate Scholars
 - William Lowell Putnam Mathematical Competition

EMPLOYMENT AND EXPERIENCE

INDUSTRY

- 2016–2017 **Senior Analyst**, *CarMax Auto Finance*, Kennesaw, GA.
Extended Service Plans (ESP)
- Manage reserve forecast for ESP returns and claims, explore improvements to actuarial models. With team, refine models creating \$2M reserve surplus.
 - Research and implement Markov network clustering algorithm as record linkage solution for ESP claims data. Consolidate 350,000+ records into groups for each distinct repair facility.
 - Supervise analyst intern for summer term. Guide research into improvements to risk segmentation by vehicle make/model.
- 2013–2016 **Strategy Analyst**, *CarMax Auto Finance*, Kennesaw, GA.
Servicing Analytics/Collections Strategy
- Design and evaluate A/B strategy testing in loan servicing
 - Research and create behavioral scorecard to predict account delinquency. Reduced 1 to 30-day collections costs by 15%.
 - Implement strategy for TCPA compliance.
 - Automate collection of data from post-call customer surveys, create customer service evaluation metric.
- 2012 **Application Developer Intern**, *SCANA Corporation*, Cayce, SC.
Financial Reporting/Peoplesoft
- Develop business-critical financial reports in SAP
 - Maintain financial report archives

ACADEMIC

- 2020–Present **Graduate Research Assistant**, *Colorado State University*, Fort Collins, CO.
- Develop model for Bayesian record linkage of many files in a streaming context.
 - Research confounding in latent space network models and develop restricted network regression.
- 2017–2019 **Graduate Teaching Assistant**, *Colorado State University*, Fort Collins, CO.
- Teach recitation and lecture sections ranging from 25–60 students in size.
 - Develop curriculum for STAT 301 and STAT 307 courses.
- 2010–2013 **Undergraduate Research**, *Clemson University*, Clemson, SC.
Intelligent River
- Research local correlation scores as statistical quality control test for real-time data.
 - Implement score in distributed computing environment on Palmetto high performance cluster.

COURSES TAUGHT

STAT 307	Introduction to Biostatistics	<i>Spring–Fall 2019</i>
STAT 301	Introduction to Statistical Methods	<i>Fall 2018</i>
STAT 204	Statistics for Business Students (recitation)	<i>Spring 2018</i>
STAT 201	General Statistics (recitation)	<i>Fall 2017</i>

PUBLICATIONS

STATISTICAL CONSULTANT

Hughes, S., Rondeau, M., Shannon, S. *et al.* A Holistic Self-learning Approach for Young Adult Depression and Anxiety Compared to Medication-Based Treatment-As-Usual. *Community Ment Health J* (2020). <https://doi.org/10.1007/s10597-020-00666-9>

CONFERENCE PRESENTATIONS

- ISBA 2021
June 28 – July 2, 2021 *Restricted Regression in Networks*
- JSM 2021
August 8–12, 2021 *Streaming Record Linkage for Online Data Deduplication*
- CMStatistics 2021
December 18-20, 2021 *Fast Bayesian Record Linkage for Streaming Data Contexts*

SEMINARS AND WORKSHOPS

Coding and Cookies: Version Control Using Git

Spring 2021

Coding and Cookies: Reproducible Reports using Rmarkdown

Fall 2021

SOFTWARE

AUTHOR

gammacount

R package providing distributions related to gamma renewal processes.

- GitHub: <https://github.com/ianmtaylor1/gammacount>

CONTRIBUTOR

wdman

R package that allows the user to manage the downloading/running of third party binaries relating to the webdriver/selenium projects.

- Project Page: <https://docs.ropensci.org/wdman/>
- GitHub: <https://github.com/ropensci/wdman>
- CRAN: <https://cran.r-project.org/package=wdman>

adaptMCMC

R package that provides an implementation of the generic adaptive Monte Carlo Markov chain sampler proposed by Vihola (2011).

- Creator/maintainer: Andreas Scheidegger
- GitHub: <https://github.com/scheidan/adaptMCMC>
- CRAN: <https://cran.r-project.org/package=adaptMCMC>

OTHER

- Stanford Open Datathon 2021 finalist – data modeling track