BYRON C. JAEGER

I am an Assistant Professor of Biostatistics and work in the School of Public Health at the University of Alabama at Birmingham.

My research focuses on blood pressure, cardiovascular disease, and machine learning.

🎓 EDUCATION

2017 | 2012

PhD, Biostatistics

Gilling's School of Global Public Health   📍 Chapel Hill, North Carolina

· **Thesis:** Extending R-squared to the Generalized Linear Mixed Model
· **Honors:** Recipient of ENAR Distinguished Student Paper Award

💼 PROFESSIONAL EXPERIENCE

Present | 2017

Assistant Professor of Biostatistics

University of Alabama at Birmingham   📍 Birmingham, Alabama

· Investigating mechanisms of cardiovascular disease and hypertension
· developing machine learning algorithms to identify who may benefit from initiating antihypertensive medications

🖥 TEACHING EXPERIENCE

Present | 2017

BST 680: Introduction to R

University of Alabama at Birmingham

· Students develop core competencies in data analysis (import, clean, transform, visualize, and tabulate) using `R`.
· Course structure promotes interactive lectures and group exercises.
· Final exam: a comprehensive research project using `R markdown`.

Present | 2020

BST 765: Advanced computational methods

University of Alabama at Birmingham

· Introduction to computational techniques such as simulation studies, bootstrapping, cross-validation, permutations, and Gibbs sampling.
· Co-instructor with Dr. Charles Katholi

💻 SELECTED R PACKAGES

2021 | 2020

table.glue

Make and Apply Customized Rounding Specifications for Tables

· GitHub Repository
· Total downloads: 1,959

CONTACT

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GitHub
Twitter 🐦

SKILLS

Statistical analysis:

    Linear mixed models
    Survival analysis

Statistical / Machine learning:

    Clinical risk prediction
    Missing data

Statistical Programming:

    R
    C++

STATS

    Citations: 610
    Papers: 35 (9 first author)
    CRAN downloads: 42,586
    Active grants: 8

This resume was made with the R package pagedown.

2021
|
2018

● **obliqueRSF**

Oblique random survival forest (ORSFs)

· GitHub Repository
· Total downloads: 12,576

2021
|
2016

● **r2glmm**

Compute model and semi-partial R-squared for mixed models

· GitHub Repository
· Total downloads: 28,051
· Total citations: 137

📖 SELECTED PUBLICATIONS

2020

● **Trends in blood pressure control among US adults with hypertension, 1999–2000 to 2017–2018**

P Muntner, ST Hardy, LJ Fine, **BC Jaeger**, ...
JAMA, 324 (12), 1190-1200

· Citations: 40
· DOI: 10.1001/jama.2020.14545

Impact metrics (In the top 5% of all research outputs scored by Altmetric)

2019

● **Oblique Random Survival Forests**

BC Jaeger, DL Long, DM Long, M Sims, JM Szychowski, ...
Annals of Applied Statistics, 3 (2019), 1847-1883

· Citations: 2
· DOI: 10.1214/19-AOAS1261

2019

● **An R-squared Statistic for Covariance Model Selection in the Linear Mixed Model**

BC Jaeger, LJ Edwards, MJ Gurka
Journal of Applied Statistics, 46 (1), 164-184

· Citations: 2
· DOI: 10.1080/02664763.2018.1466869

ENAR Distinguished Student Paper Award

2017

● **An R-squared Statistic for Fixed Effects in the Generalized Linear Mixed Model**

BC Jaeger, LJ Edwards, K Das, & PK Sen
Journal of Applied Statistics, 44 (6), 1086-1105

· Citations: 161
· DOI: 10.1080/02664763.2016.1193725