


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`.

SELECTED R PACKAGES

2020

- **table.glue**
Make and Apply Customized Rounding Specifications for Tables
 - [GitHub Repository](#)
 - Total downloads: 462

2020
|
2018

- **obliqueRSF**
Oblique random survival forest (ORSFs)
 - [GitHub Repository](#)
 - Total downloads: 10,153



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: 467
First author papers: 9
CRAN downloads: 35,111
Active grants: 7

*This resume was made with the
R package [pagedown](#).*

2020
|
2016



r2glmm

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

- [GitHub Repository](#)
- Total downloads: 24,496
- Total citations: 112



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: 4
- 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: 1
- 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: 141
- DOI: 10.1080/02664763.2016.1193725