# **DREW SCHMIDT**

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% https://github.com/wrathematics

Knoxville, Tennessee

# **RECENT WORK EXPERIENCE**

#### **Graduate Research Assistant**

### **University of Tennessee, Knoxville**

iii 2015 - ongoing ♥ Knoxville, TN

Student researcher solving problems in data science & supercomputing.

- Built client/server for R able to control thousands of R sessions.
- Co-developed the bindings for ZeroMQ now used by the Jupyter/IPython R kernel.
- Independently lead research into fast, memory efficient covariance/correlation computations.

#### Research Associate

#### **University of Tennessee, Knoxville**

Developer and data science consultant for UTK and XSEDE.

- Co-founded pbdR project; co-lead developer on the project.
- Consulted with academics to optimize and scale their applications.

#### **Statistics Consultant**

#### **University of Tennessee, Knoxville**

Student worker for Research Computing Support group.

- Helped guide research and statistical analysis for students and faculty.
- Streamlined university's analytics software download system.

# **SELECTED PROJECTS**

### pbdR Project

I July 2012 - ongoing ♥ Knoxville, Tennessee

A package ecosystem for machine learning and statistics on large, distributed data for the R language.

- High level R interfaces and extensions to MPI, ScaLAPACK, etc.
- Fit linear regression models on 2 terabytes in under a minute with 50,000 cores of a supercomputer.
- Software installed at computing centers around the world.

### **Text Analysis Gateway**

mar 2015 - July 2015

Interactive text analysis webapp for the XSEDE supercomputing project.

- Developed the initial codebase.
- Numerous preprocessing, analysis, and vis utilities, including topic modeling with LDA, and n-gram tokenization.

## **EDUCATION**

### PhD Business

**Analytics** 

**University of Tennessee, Knoxville** 

4.0 / 4.0

2015 - ongoing √ Knoxville, TN

#### M.S. Mathematics

**University of Tennessee, Knoxville** 

GPA **3.79** / 4.0

### **B.S.** Mathematics

Tennessee Tech University

GPA

**3.79** / 4.0

# **LANGUAGES & SKILLS**

### **Programming**

R

C/C++

**Fortran** 

**BASH** 

## **Analysis and Modeling**

**Dimension Reduction** 

Text Mining

Regression

GLM

**Time Series** 

# **HONORS**



Research featured in HPCwire.



Co-writer and senior staff on large DMS NSF grant.