

DREW SCHMIDT

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<https://github.com/wrathematics>

Knoxville, Tennessee

SUMMARY

I'm a data scientist with a talent for software engineering. I'm passionate about high performance code, distributed systems, and open source software. My research interests primarily involve high performance statistical computing, especially dimension reduction and machine learning.

RECENT WORK EXPERIENCE

Graduate Research Assistant

University of Tennessee

2015 - ongoing Location

Student researcher working at the intersection of data science and supercomputing.

- Built client/server framework for connecting multiple R sessions.
- Independently lead research into new, fast, memory efficient covariance/correlation computations.

Research Associate

University of Tennessee

2012 - 2015

Developer and data science consultant for the National Institute for Computational Sciences.

- Developed pbdR software and interfaces to solve data analysis problems on large distributed resources.
- Consulted with academics to port and scale their analytics applications to supercomputers.

Statistics Consultant

University of Tennessee

2011 - 2012

Half time GRA for Research Computing Support group.

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

PROGRAMMING SKILLS

R

C/C++

Fortran

BASH

git

MPI

EDUCATION

PhD Business Analytics

University of Tennessee

2015 - ongoing

M.S. Mathematics

University of Tennessee

2006 - 2010

B.S. Mathematics

Tennessee Tech University

2002 - 2006

SELECTED PROJECTS

pbdR Project

2012 - ongoing Knoxville, Tennessee

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

- Fit linear regression models on multi-terabytes in a matter of seconds with 50,000 cores of a supercomputer.
- Software installed at elite research computing centers around the world.

Text Analysis Gateway

2015 - 2016

Interactive text analysis webapp for the XSEDE supercomputing project.

- Developed the initial codebase and helped with its first deployment.

HONORS



Research featured in HPCwire.



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