

# Tedward Erker

Madison, WI  
☎ (314) 324 6079  
✉ [tedward.erker@gmail.com](mailto:tedward.erker@gmail.com)  
📄 [stat.wisc.edu/~erker/](http://stat.wisc.edu/~erker/)  
🌐 [tedwarderker](https://www.linkedin.com/in/tedwarderker)

## Summary of Qualifications and Skills

Biometry M.S. and Forestry Ph.D. (expected spring 2019) with 5 years of research and data analysis experience and 2 years of high school teaching experience. Comfortable with a wide range of statistical methods including generalized linear models and tree-based methods. Driven to understand complex problems and distill key findings for nonexpert audiences via fully reproducible reports and compelling figures. Independently motivated. A positive, constructive team member and leader. Passionate about working in education.

## Experience

2015–Present **Research Assistant**, *UW-Madison*.

- Map Urban Forests of Wisconsin
  - Tested 3 machine learning algorithms to classify nearly a terabyte of imagery
  - Processed imagery in parallel at UW's Center for High Throughput Computing
  - Geospatial analysis in R and image segmentation in python.
- Carbon Budget of Urban Forest
  - Assessed impact of tree canopy on residential building energy use and carbon emissions of ~30,000 Madison homes.
- Canopy Foliar Trait Mapping with Imaging Spectroscopy.
  - Applied partial least squares regression models to predict foliar canopy traits (e.g. nitrogen content) from imaging spectroscopy data
  - Explored anthropogenic and environmental drivers of trait variation across Madison, WI.

2013–2015 **Teaching Assistant**, *UW-Madison*.

- Statistical Methods for Bioscience II, Spring 2015
  - Led 2 weekly discussion groups, graded homework and exams for this graduate-level course largely covering multiple linear and logistic regression
- Forest Ecology, Fall 2013 and Fall 2014
- Living With Wildlife, Spring 2014

2010–2012 **Chemistry and Biology Teacher**, *Confluence Prep Academy*, St. Louis.

- Educated over 120 students in six classes daily.
- As first year teacher, developed chemistry curriculum for new charter school integrating College Readiness Standards with Missouri Science Standards.

2010–2012 **Corps Member**, *Teach For America*, Chicago & St. Louis.

## Education

2013–Present **Ph.D.**, *University of Wisconsin–Madison*, 3.929.  
Forestry, Department of Forest and Wildlife Ecology

2013–Present **M.S.**, *University of Wisconsin–Madison*.  
 Biometry, Department of Statistics

2006–2008 **B.A.**, *Washington University in St. Louis*, 3.83.

2009–2010 Environmental Studies–Ecology/Biology, Summa Cum Laude

## Relevant graduate coursework

- Tools for Reproducible Research
- Statistical Methods-Spatial Data
- Intro Mathematical Statistics I & II
- Teaching Statistics
- Advanced Data Analysis with R
- Multilevel Models
- Statistical Meth. for Bioscience I & II
- Statistical Consulting

## Skills

Writing	<i>1 scientific paper in review; over \$150,00 in proposals</i>
Presenting	<i>2 scientific posters, 1 academic presentation, 4 years of teaching</i>
Data Display	<i>Daily use of grammar of graphics in R's ggplot2</i>
Statistical Analysis	<i>GLMs, GAMs, multilevel models, shrinkage and dimension reduction, tree-based methods, dependent data in R and some Stan</i>
Computing	<i>R, python, webscraping, emacs org mode, unix command line, version control (git)</i>

**Tedward Erker**  
Madison, WI  
(314) 324 6079  
✉ [tedward.erker@gmail.com](mailto:tedward.erker@gmail.com)  
📄 [stat.wisc.edu/erker/](http://stat.wisc.edu/erker/)

**Education Analytics Recruitment Team**

June 25, 2018

*Education Analytics, Inc.*  
131 West Wilson Street, Suite 200  
Madison, WI 53703

To Research Analyst Hiring Manager,

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis ullamcorper neque sit amet lectus facilisis sed luctus nisl iaculis. Vivamus at neque arcu, sed tempor quam. Curabitur pharetra tincidunt tincidunt. Morbi volutpat feugiat mauris, quis tempor neque vehicula volutpat. Duis tristique justo vel massa fermentum accumsan. Mauris ante elit, feugiat vestibulum tempor eget, eleifend ac ipsum. Donec scelerisque lobortis ipsum eu vestibulum. Pellentesque vel massa at felis accumsan rhoncus.

Suspendisse commodo, massa eu congue tincidunt, elit mauris pellentesque orci, cursus tempor odio nisl euismod augue. Aliquam adipiscing nibh ut odio sodales et pulvinar tortor laoreet. Mauris a accumsan ligula. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Suspendisse vulputate sem vehicula ipsum varius nec tempus dui dapibus. Phasellus et est urna, ut auctor erat. Sed tincidunt odio id odio aliquam mattis. Donec sapien nulla, feugiat eget adipiscing sit amet, lacinia ut dolor. Phasellus tincidunt, leo a fringilla consectetur, felis diam aliquam urna, vitae aliquet lectus orci nec velit. Vivamus dapibus varius blandit.

Duis sit amet magna ante, at sodales diam. Aenean consectetur porta risus et sagittis. Ut interdum, enim varius pellentesque tincidunt, magna libero sodales tortor, ut fermentum nunc metus a ante. Vivamus odio leo, tincidunt eu luctus ut, sollicitudin sit amet metus. Nunc sed orci lectus. Ut sodales magna sed velit volutpat sit amet pulvinar diam venenatis.

Albert Einstein discovered that  $e = mc^2$  in 1905.

My best,

**Tedward Erker**

*Attached: resume*