

# Luke Reding PhD

639 11<sup>th</sup> St NE  
Washington, D.C. 20002

240.678.8175

[luke@lreding.com](mailto:luke@lreding.com)

[website](#) :: [blog](#) :: [GitHub](#) :: [LinkedIn](#) :: [Twitter](#)

## About me

I'm a researcher that uses computers to solve problems. As a graduate student, I brought the era of big data to my lab. I spent six years developing research questions, designing experiments, automating data collection, and making sense of the results. Since then, I've worked as a data scientist on all steps of data science pipelines, from querying data to building models to maintaining a reusable code base. Focus on model explainability.

## Experience

Data Science Engineer :: Cerebri AI :: June 2018 - present

- Create predictive models for Fortune 500 companies to drive key KPIs
- Design architecture for code reuse, developed unit-testing framework
- Responsible for developing a roadmap for model explainability (SHAP, PDPs, ICE, etc.)
- Experience with SQL, Python, Spark, and some Scala
- Co-inventor on two submitted patents

Data Science Intern :: [Continuum Analytics](#) (now Anaconda) :: Summer 2017

- Authored data science example projects and blog posts for data scientists
- Wrote and deployed REST APIs
- Created ML examples for Gartner Magic Quadrant submission
- Collaborated with project managers, UI/UX designers, and senior developers

[Texas Venture Labs](#) Associate :: August 2017 - May 2018

- Validated new markets to allow two Austin startups to expand into new markets
- Collaborated on a team with business, law, and engineering graduate students

Independent research & data analysis :: Dissertation research :: August 2012 - May 2018

- Designed randomized, controlled experiments to explore decision-making
- Wrote Python and bash code to automate data collection
- Analyzed, visualized, and presented data using R and R Markdown
- Wrangled datasets with  $>10^6$  of observations and dozens of variables
- Used regression, mixed models, and GLMs to analyze data and publish four peer-reviewed papers
- Led a team of 2-8 to coordinate data collection on a variety of projects

## Education

University of Texas at Austin – PhD Integrative Biology.

College of William and Mary — B.S. Biology, minor Mathematics. *Summa cum laude, Honors*

## Skills and strengths

- R :: 7 years :: dplyr, tidyr, purrr, ggplot2, igraph, ggnet2, caret
- Python :: 6 years :: numpy, pandas, scikit-learn, XGBoost, matplotlib, imbalance-learn, shap
- Other: Bash scripting, PySpark, SQL (MonetDB, Postgres), basic Unix commands
- Gallup Strengths :: learner, achiever, focus, analytical, input