

CHRISTOPHER LEEDS

EXPERIENCE

Monsanto Company

Data Scientist

July 2016 - Present

Chesterfield, MO

- Align scientific and controlled environment analytics teams towards shared analytic objectives.
- Shape vision of data science best practices at Monsanto Co as a member of the Data Science Council.
- Benchmark statistical models with simulated data to gauge analytic performance.
- Develop power analysis R-package for semi-automation of "Stroup" power analysis method.
- Spearhead development of outlier screening R-package to operate across functional analytics teams.
- Collaborate with stake holders to standardize & automate outlier screening procedures as an API.
- Automate & scale high-throughput discovery assay analytics by deploying an opencpu API in AWS.

NetEffects, Inc.

Applied Statistician (contracted with Monsanto Company)

August 2015 - July 2016

Chesterfield, MO

- Leveraged design concepts such as grouping, randomization & blocking to create effective trial layouts.
- Utilized "Stroup" power analysis method to estimate experiment scope and efficacy.
- Identified outliers in trial data by utilizing non-parametric model-based outlier detection procedures.
- Performed mixed model analysis using SAS (PROC MIXED), R (lme4, asreml packages).
- Visualized raw data and analysis results via SAS (ODS graphics) and R (ggplot2, plotly).
- Developed R-package to automate genotype screening for environmental interactions.

STATKING Consulting Inc.

SAS Programmer

June 2014 - August 2015

Fairfield, OH

- Created and validated SDTM and ADaM datasets for FDA submission of clinical trial data.
- Constructed the tables, listings and figures to inform decision-makers regarding trial outcomes.

University of Missouri, Statistics Department

Graduate Instructor

August 2012 - May 2014

Columbia, MO

- Facilitated discussions for topics ranging from probability rules & calculations, distributions, and hypothesis testing for approximately 120 undergraduate students per school year.

EDUCATION

University of Missouri, Columbia, MO

Master of Arts in Statistics

2014

Truman State University, Kirksville, MO

Bachelor of Science in Economics

2012

TECHNICAL

Programming Languages

SAS, R, SQL, Python, HTML, CSS

Statistical Techniques

Linear Mixed Models, ANOVA, Linear Regression

Development Tools

Git, Jenkins, opencpu, Domino, R-Studio, Jupyter, Shiny, Hugo, Atom

Development Interests

Spatial Modeling, Machine Learning, Bayes & MCMC,
Python - Dash, Python - Django