

Principal Data Scientist

Columbus, OH

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Bio

I am a results-oriented technical lead committed to solving real-world problems with data science. I have 8+ years experience in predictive modeling and 3+ years experience leading cross-functional teams, and extensive experience with advanced statistical & machine learning methods including Bayesian modeling, deep learning and probabilistic forecasting. I have authored multiple peer-reviewed publications and patents.

#### Skills

Expert: Statistics Machine learning

Predictive modeling Probabilistic forecasting

Project management

Experienced: Backend engineering

Remote sensing Al software development

Novice: Frontend engineering

Web development

Tools

Proficient: Python Bash Git SQL Tensorflow Spark Javascript HTML

CSS

Prior experience: AWS PyTorch C++ R

Matlab LaTeX QGIS

## **Personal Projects**

- Kaggle competition: Birthweight prediction
- Training journal: Bayesian metabolic markers
- Web app: fitnesssignals.com

This CV is available at hrmerrill.github.io

You can also find me on LinkedIn Last updated: 10 May 2025



University of Florida Agricultural & Biological Engineering Advisory Board

Dec 2022 - Current

Responsible for advising on the department's mission statement and strategy, as well as ensuring curricula result in successful placement of graduates.



# Experience

# Climate LLC / Bayer

**Principal Data Scientist** 



I lead agile teams to deliver ML-enabled tools and software. I am responsible for influencing the strategic direction of the business unit and for defining quarterly milestones and two-week deliverables, and for working with commercial teams to align software development with business goals.

- · Improved field boundary management experience by developing and deploying a QGIS plugin.
- · Automated practice change evidence verification by developing and deploying image- and text-classification neural network models
- · Explored efficient and compliant AI tools by fine-tuning and in-house hosting agent- and RAG-based LLM frameworks for natural language queries of carbon market registry documentation.

## **Lead Data Scientist**



I led agile teams to deliver predictive models for crop diseases. I was responsible for defining scientific strategy, quarterly milestones and two-week deliverables, and for working with commercial teams to align scientific research with business

- · Enabled crop protection insights by developing and deploying a deep learning gaussian process model for jointly forecasting multiple diseases.
- Improved data collection efficiency by defining a data valuation strategy & hiring two contractors to execute on it.
- · Identified and addressed the risks of collecting more of the same data across programs.

#### Senior Data Scientist



- Enabled in-season wheat disease forecasts by developing probabilistic deep learning models.
- Improved crop yield models by creating deep learning embeddings of high-dimensional environmental data.
- · Mentored an intern to develop probabilistic deep learning models to forecast soybean yield over long lead times.

## Geospatial Statistician

May 2017 - April 2018

Identified crop nutrient deficiencies in soil by developing predictive statistical models using satellite imagery.

# Education

# University of Florida

PhD, Agricultural and Biological Engineering 
May 2014 - May 2018

MStat, Statistics ## Aug 2012 - May 2014

## Mississippi State University

BS, Mathematics 
Aug 2008 - May 2012