

- 🚊 🛛 Principal Data Scientist
- 😚 Columbus, OH
- <u>hmerrill12@gmail.com</u>

💄 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 <u>peer-</u> reviewed <u>publications</u> and <u>patents</u>.

* 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: <u>Birthweight prediction intervals</u>
- Training journal: <u>Bayesian metabolic markers</u>
- Web app: <u>fitnesssignals.com</u>

This CV is available at <u>hrmerrill.github.io</u>

You can also find me on <u>LinkedIn</u>. Last updated: 31 May 2025



Taimaka

May 2025 - Current

Responsible for deploying and automating machine learning models that predict poor health outcomes of patients.

UF ABE Advisory Board

🛗 Dec 2022 - Current

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

Experience

Climate LLC / Bayer

Principal Data Scientist

🛗 Sept 2024 - Current

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

🛗 Nov 2020 - Sept 2024

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 goals.

- 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

🛗 April 2018 - Nov 2020

- · Created 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.

Freelance

Grant Review Panel Member

🛗 2024 & 2025

Reviewed grant proposals for the USDA's Data Science for Food and Agriculture Systems awards.

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