Ryan M. Hastings

843 N DeQuincy St.
Indianapolis, IN 46201
cell: (814) 404-7155
buoyant.gas@gmail.com
https://github.com/RyanHastings/portfolio

ABOUT ME

A former research meteorologist who specialized in modeling severe storms, I pivoted to data science in 2019. What I love most about this field is the ability to apply my mathematics skills to a diverse set of problems, which have so far included behavioral economics, epidemiology, and record matching.

OBJECTIVE

Position as a data scientist

EMPLOYMENT

Indiana Department of Health
March 2020 - April 2025

Data Scientist and Statistician

- Matching and linking medical records including infant mortality
- Wrote IDOH Covid model
- Using models to explore factors influencing infant mortality
- Maintained part of a dashboard pipeline
- Explored outbreak detection
- Assisted epidemiologists with statistical analysis

Indiana Commission for Higher Education
April 2019 - March 2020

Data Scientist

- Developed model to predict what former college students might return given the opportunity
- Developed model to predict college attendance based on high school records

EDUCATION

The Pennsylvania State University, University Park, PA
PhD in Meteorology

The Pennsylvania State University, University Park, PA
MS in Meteorology

University of Texas, Austin, TX
BS in Pure Mathematics

SKILLS

Machine Learning - Classification models including logistic regression, random forests, and neural networks; NLP including BERT

Coding Languages and Packages

- **python:** pandas, numpy, scipy, scikit-learn, pytorch, tensorflow, splink, the_fuzz, matplotlib, seaborn, shap
- **R:** tidyverse, fastLink, ggplot2, caret, e1071, knitr, stringr
- **Other:** SQL, perl, FORTRAN, matlab, SAS

Other Software - Jupyter Hub, Azure Databricks, creating and running pipelines in Azure Data Factory, working with Logic Apps in Azure

Other Skills - Public speaking and presentations (former visiting professor who presented at professional meteorologicla conferences), effective communication of complex concepts into language for nonspecialists

Personal Interests - Sanskrit, Classical Chinese, Pali