Henry Williams

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Interdisciplinary data scientist, problem-solver, and communicator dedicated to optimal and ethical decision-making. Equally happy wrangling data, leveraging statistics and machine learning to uncover insights that reliably deliver real value, and sharing those insights with technical and nontechnical audiences alike.

Languages and Software: R, Python, SQL, Tableau, AWS, ArcGIS, Excel, Linux, Git.

Certifications: PCEP — Python Certified Entry-Level Programmer. Preparing for AWS Certified Cloud Practitioner.

EDUCATION

M.S. in Analytics May 2024

Institute for Advanced Analytics, North Carolina State University

B.S. in Statistics, B.A. in Philosophy

May 2021

University of North Carolina at Chapel Hill

PROJECTS

M.S. PRACTICUM PROJECT, ATRIUM HEALTH

August 2023 — Current

Communication Lead

- Predicting ICU readmissions by building logistic regression and machine learning models in Python.
- Transforming and posturing complex datasets of electronic health records from over 25,000 patients for explanatory and predictive modeling.
- Developing a Tableau dashboard to aid clinicians in real-time patient evaluations.

PERSONAL PROJECT, JOURNAL DIGITIZATION

February 2024 — Current

- Fine-tuning a Transformer-based AI model to enable OCR of years of hand-written journal entries.
- Prepared a complex dataset for modeling by automating pre-processing of 15,000 lines of text using Python.

WORK EXPERIENCE

U.S. ENVIRONMENTAL PROTECTION AGENCY

Research Triangle Park, NC

Toxicology Data Curator (Contract)

May 2022 — May 2023

- Expanded public-facing toxicology records database by over 25% (65,000+ records) through a mixture of Python scripting and web crawling, manual cataloging, and collaboration with the EPA Libraries.
- Extracted, transformed, and loaded all catalogued data using R and SQL to clean and pre-process.
- Developed and maintained cloud storage API connectivity functions for an internal Python package with 20+ users that have since been used to migrate terabytes of data.

VOLUNTEER EXPERIENCE

UNC STATISTICAL CONSULTING CENTER

Chapel Hill, NC

Statistical Consultant

January 2022 — May 2022

- Fielded and discussed project proposals from a diverse set of clients across the university to assess project scope, feasibility, and initial approaches.
- Built a data cleaning pipeline in R to extract, transform, and load over 11,000 survey responses for future analysis while maintaining dialogue with our collaborators to ensure our process fit their goals.