AIDAN HORN
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EDUCATION

Worcester Polytechnic Institute (WPI), Worcester, MA — May 2023
Combined BS/MS in Data Science
Overall GPA: 3.83

SKILLS

Python | Flask | Pandas | Scikit-Learn | TensorFlow | Keras | Excel Stat Tools | R
SQL | Git | Jupyter Lab | aPriori Standalone | modeFrontier

WORK EXPERIENCE

Sensitivity Analysis Intern: aPriori Technologies, Concord, MA — **April 2021 – December 2021**

- Designed, ran, and documented experiments testing the behavior of manufacturing cost models within the aPriori software suite. Compiled, presented, and defended results both internally and with clients.
- Contributed domain knowledge on statistical assumptions, random sampling methods, and distributions.
- Developed Python workflow for hypothesis testing and simulating data in tandem with modeFrontier.
- Successfully negotiated contract extension to assist with broader analytics projects within the company.

Undergraduate Student Researcher: Data Analytics for Africa, WPI — **Summer 2020**

- Worked with a research partner under faculty mentorship exploring the intersection of data science and development studies focusing on natural language processing.
- Built grounded theory coding tools for interviews using naïve Bayesian classifiers and LDA topic modeling.
- Gathered data with Twitter REST API, utilized Python libraries for cleaning, exploration, and visualization.
- Presented findings with actionable insights into the applicability of data science at WPI project centers.

Computer Science Work-Study: ASSISTments, WPI — **August 2019 – August 2020**

- Built problem sets for online education resource for elementary and middle schoolers.
- Analyzed performance data examining test anxiety in online schooling.

PROJECT WORK

Breast Cancer Detection Collaborative Project

- Convolutional Neural Network exported as TensorFlow Lite model deployed with React.
- Determined best practices for data aggregation and training to protect patient privacy.
- Ensured model would work with low fidelity ultrasounds for deployment in rural clinics.

MXene Automated Systematic Literature Review

- Currently assisting PhD group in predicting properties of 2D chemistries (MXenes) through novel aggregation and analysis of recently published studies using web scrapers.
- Trialing various systematic review methods and topic modelling techniques to automate ground truthing of predictive models using NLP techniques.

RELEVENT COURSES

Machine Learning | Data Mining and Knowledge Discovery in Databases | Introduction to AI
Linear Programming and Optimization | Business Data Management with SQL | Algorithms
Business Data Analytics | Statistics I & II | Applied Probability