# PETE PRITCHARD

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### **EDUCATION**

**University of Michigan** 

MS Applied Statistics Aug. 2023 - May 2025

**University of Tennessee** 

Chattanooga, TN BS Applied Mathematics, BA Economics Aug. 2020 - May 2023

EXPERIENCE

**NASA** June 2024 - Aug. 2024

Software Engineering Intern

Washington, DC

Ann Arbor, MI

- Worked with a small, diverse team of interns with expertise in software engineering, UI/UX, strategic communication, and data science/engineering to enhance research and testing capabilities of national wind tunnel facilities
- Used Python to build real-time data applications of operational and test data to provide comprehensive visualizations, reveal patterns and drive more effective decision-making and business outcomes
- Engineered an advanced analytics platform using Python, Google Cloud Storage, and Firestore, deployed via Docker on an existing NASA cloud environment

NASA June 2023 - Aug. 2023

Data Science Intern Washington, DC

- Developed and deployed short-term and long-horizon demand forecast models and dashboard using Python (Nixtla) and Plotly Dash, enhancing forecasting accuracy and decision-making
- Created an API wrapper for a 20+ year old SAP database, enabling financial managers to quickly access reports and reducing report generation time by 90%
- Added over 30 SQL queries to the codebase and collaborated on designing a database schema, improving data retrieval efficiency and structure

**University of Michigan** 

Aug. 2023 - Present

Graduate Student Instructor

Ann Arbor, MI

- Leading labs, grading assignments, and providing aid to 60+ students Introduction to Stats and Data Analysis
- Managing canvas page, scheduling meetings and serving as primary communicator between students and professors
- · Received high student satisfaction reports and promoted to Graduate Student Mentor after one semester

**University of Tennessee** 

Feb. 2023 – June 2023

Research Assistant

Chattanooga, TN

- Conducted comprehensive analysis of various statistical and ML techniques to predict viral spread, leveraging large datasets from Google Trends and Covid-19 sources
- Engineered an advanced LSTM network model in R utilizing Keras and TensorFlow libraries to enhance predictive accuracy
- Demonstrated superior model performance by achieving a 15% increase in prediction accuracy over classic time series models like VAR and ARIMA.

#### **PROJECTS**

#### **Fantasy Football Helper** | *Python*, <u>code</u>

Jan. 2024 - Present

- Built a discord chat bot using Python to present weekly power rankings with commentary, playoff odds using Monte Carlo simulations, transactions, and more
- Integrated web scraper with beautifulsoup4 to allow league members to query NFL player statistics

## **NHANES** | *Python, Scikit-learn, code, report*

Jan. 2024 - April 2024

- Investigated the presence of volatile organic compounds (VOCs) in human blood samples and their relationship with various levels of exposure to tobacco products
- Accomplished this objective by leveraging interpretable statistical learning models and thorough data analysis

#### **TECHNICAL SKILLS**

Languages: Python, R, SQL (Postgres), C++, Java, HTML/CSS

Developer Tools: Git, Google Cloud Platform, Dataiku, Docker, Looker, Linux Libraries: Pandas, NumPy, PySpark, PyTorch, Tensorflow, Keras, Scikit-learn, Plotly Modeling: Supervised Learning, Neural Networks, Clustering, Time Series, Hidden Markov