# DHRUV SHAH

#### Education

#### Purdue University, West Lafayette, IN

Aug 2021 – Anticipated May 2025

Bachelor in Data Science and Applied Statistics Minor in Bioinformatics and Chemistry

GPA: 3.68/4

## Experience

Northrop Grumman

May 2024 - Present

Software Engineer Intern

Dulles, VA

- \* Developing a **Python script** to comprehensively evaluate historical labor data and map it to various milestones, helping the program identify and visualize growth
- \* Advancing the **SQL** database queries and Python scripts to investigate specific manufacturing costs and labor data, enabling the functional and program teams to provide real-time feedback and impact decision-making

Purdue University

August 2023 - Present

Head Teaching Assistant

West Lafayette, IN

- \* Assisting Professor Mark Daniel Ward in the Data Mine with fundamental concepts to manipulate/visualize data to effectively communicate insights
- \* Managing 10+ teaching assistants in project review and solutions and office hours to streamline communication between faculty and students

Otsuka Pharmaceuticals

May 2023 - August 2023

Data Analyst Intern

Princeton, NJ

- \* Redesigned a dashboard by documenting and storing all the data in a single source of truth and enhancing 4 visualizations through a more interactive approach in **Tableau/SQL**
- \* Created a self-reporting system to reflect live updates from **Azure analytics** by obtaining the data using an agile structure and building 2 different **powerBI** reports based on the end user
- \* Displayed visualizations for trends in enrollment data by using **machine learning** techniques to determine statistical significance and trends in data visualization

Purdue University

January 2022 - Present

Undergraduate Healthcare Engineering Researcher

West Lafayette, IN

\* Leverage skills in **machine learning modeling** and data consolidation with large real world data sets (1000 plus patient data) to investigate associations between diagnosis and procedures for ischemic heart diseases using the apriori algorithm

### Purdue University/Merck

August 2021 - May 2022

Undergraduate Data Science Researcher

West Lafayette, IN

- \* Built a data pipeline to perform statistical analysis and apply machine learning models to enable forecasting and predictive models for drug substances and drug product formulation development
- \* Trained to use **R**, **SQL**, and **Python** in STAT 19000 to assist Merck formulators with the logical aspects of sample inventory management and increase efficiency in the drug development process by expediting information retrieval, reducing experimental redundancy, and enabling inventory forecasting

#### **Projects**

### Workout Application

January 2024 - Present

- \* Designed a relational database schema using **Python and Django ORM** to enhance user experience by enabling comprehensive tracking of workouts, exercises, and equipment
- \* Developed dynamic web pages using **HTML and Django** that provide real-time, interactive updates on users' workout progress over extended periods based on user input

Discussion Forum April 2022

- Designed a discussion board for 100+ students and professors to sign-up or log-in to their account that alters based on their role
- Created an algorithm that verifies if the post is within the scope of the discussion, assign students' grades based on their performance, and allow 100+ students to vote on other students' posts
- Utilized **socket and I/O programming** to display the key components of the discussion board in an aesthetic and user-friendly manner and stores the information in the server

# Technical Skills

Languages/Database: Python, R. Java, SQL, Linux, PowerBI, Tableau, Azure

**Relevant Coursework**: Data Structures and Algorithms, Statistical Theory, Foundations of Data Analysis, Problem Solving and Object-Oriented Programming, Information Systems, Data Mining and Machine Learning

Libraries: NumPy, Pandas, TensorFlow, PyTorch, Hadoop, Spark, Matplotlib, Scikit-learn, Django

Hobbies: Golf, Intramural Soccer, Community Service, Traveling