

# DHRUV SOOD

New York • +1 (203) 428-8995 • [ds7403@nyu.edu](mailto:ds7403@nyu.edu) • [linkedin.com/in/sooddhruv2](https://www.linkedin.com/in/sooddhruv2) • [sooddhruv.github.io](https://sooddhruv.github.io)

## EDUCATION

NEW YORK UNIVERSITY, New York, United States

May 2025

*Master of Science - Information Systems*

VELLORE INSTITUTE OF TECHNOLOGY, Vellore, India

June 2023

*Bachelor of Technology - Information Technology*

*Coursework: Data Mining, Database Management Systems, Artificial Intelligence, Tech Product Management, Data Science*

## TECHNICAL SKILLS

**Programming** – Python (Numpy, Pandas, SciPy, Seaborn, Matplotlib, TensorFlow), C++, Flutter, SQL, ETL Processes

**Analytics** – Classification & Regression (SVM, kNN, Gaussian, Random Forest), Visualization, Clustering (K-means & Hierarchical)

**Tools** – VS Code, Git, Jira, Tableau, Power BI, Microsoft Office Suite (Access, Excel, Word, PowerPoint), DataRobot, Pipeline Pilot

## PROFESSIONAL EXPERIENCE

DASSAULT SYSTÈMES

2024

*Machine Learning Engineer Intern*

Bengaluru, India

- Achieved a 15% reduction in downtime and maintenance costs through the implementation of a predictive maintenance model, increasing operational efficiency in automotive welding systems.
- Constructed a machine learning model with 99% accuracy leveraging class rebalancing techniques and A/B testing to identify the best-performing model
- Utilized ETL (Extract, Transform, Load) processes to efficiently handle and preprocess large sensor datasets, enabling accurate prediction modeling
- Applied statistical analysis using Pipeline Pilot to identify key patterns and trends in sensor data, enhancing predictive model accuracy by 20%

ERNST & YOUNG

2023

*Data Science Intern*

Gurgaon, India

- Reduced safety risks by ensuring timely and accurate detection of dashboard warnings, reducing missed alerts by 30%, thereby boosting vehicle safety
- Devised an ML model using the YOLOv7 algorithm to identify warning signal lights in the car dashboard
- Enhanced model accuracy and robustness for the image detection model by applying the bagging technique and using different backbone architectures, achieving 98% accuracy in object identification
- Collaborated with cross-functional teams to integrate the ML model into a mobile app, resulting in a 30% improvement in real-time warning signal detection accuracy

## ACADEMIC PROJECT

**Predicting Trends in Ethical Consumerism**

2024

- Analyzed public sentiment on corporate sustainability and stock prices by scraping Reddit with PRAW and applying VADER and TextBlob for sentiment analysis
- Built a Python pipeline on NYU HPC to process sentiment data and align it with stock prices via yfinance API
- Streamlined data collection by managing API rate limits and refining filtering techniques for sentiment-driven stock trends

**Cardiovascular Disease Analysis Using Machine Learning**

2024

- Created Tableau dashboards to gain insights into 3 high-risk factors contributing to cardiovascular disease, resulting in a 30% increase in clarity regarding the leading cause of the disease
- Analyzed the dataset of about 500,000 records and assisted the data science team with data validation
- Performed feature engineering and exploratory data analysis using DataRobot, improving data comprehensibility by 25%
- Conducted research and delivered data-driven critical insights to diverse stakeholders involved in decision-making

**Deepfake Detection Using Machine Learning**

2022

- Developed an ensemble model in Python leveraging Xception and Inception-ResNet-v2 models to identify deepfake media
- Delivered 98.6% accuracy of the model by implementing multi-scale training and optimizing the hyperparameters of the model
- Constructed a custom dataset with over 20,000 photos and 1,000 videos, annotated using Roboflow, ensuring model robustness and effectiveness in distinguishing between real and manipulated media.

## ADDITIONAL COURSES AND CERTIFICATIONS

- Product Management Essentials – *University of Maryland*
- Cloud Computing Foundation – *Gold level Certificate by NASSCOM*