

Harnish Shah

Data Scientist / Data Analyst / ML Engineer

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SUMMARY

I am an aspiring Data Scientist with a background in the Medical Devices Industry. For nearly a decade I worked to design, test and optimize medical devices for communities worldwide. I've sifted through unstructured data to drive business decisions with insights – and I love it! With my analytical reasoning, machine learning and communication skills, I am looking for opportunities to boost efficiency and revenue.

SKILLS

Languages: Python | SQL | R | Scala | Spark

Technologies: Github | Databricks | Tableau | Google Suite | VS Code | Command Line | AWS EC2 | Flask | Jupyter Lab | Docker

Skills: Web Scraping | Data Cleaning | Linear Models | Tree Models | Support Vector Machines | Predictive Modeling | Time Series / Seasonality Analysis | Neural Nets (DNN, RNN, CNN) | Natural Language Processing (NLP) | Principal Component Analysis (PCA) | Pipelines | Data Visualization | Data Analysis | Data Management

Python libraries: Pandas | NumPy | Matplotlib | Seaborn | Scikit-learn | Natural Language Toolkit (NLTK) | Beautiful Soup | TensorFlow / Keras | PySpark

PROFESSIONAL EXPERIENCE

Soma Technology Intl

May 2018 – Jan 2024

Biomedical Engineer – Data Analyst, Bloomfield, CT

- Analyze large amounts of down the service costs data and develop statistical models to find patterns and solve problems that will help drive strategic business decisions, which helped bring of the company over 1M annually.
- Design and implementation of machine learning solutions using regression, model, clustering (KNN, K-means, Bayesian), statistical profiling, inference, classification, and predictive analysis and it increased the efficiency of field service engineers and the service team by reducing the overall breakdown visits to the healthcare organizations by more than 50%.
- Working knowledge of medical device and combination product regulations and standards such as 21 CFR Part 4,21 CFR 820, ISO 13485, and ISO 14971
- Experience with change controls, deviations, CAPA Experience with Medical Device or Combination products.
- Understanding of the six-sigma process, applying statistical tools to solve statistical problems.

DATA SCIENCE PROJECTS

Recommender System, Traditional Retail Company

Jupyter Lab, Tableau

- Audited, validated, and scrubbed 10M+ rows of sales data and performed the RFM analysis
- Utilized supervised models to get the accuracy of over 97% taking users and the products they purchased
- Built a Recommender System based on user and the products purchased
- Performed seasonality analysis to predict the upcoming sales using the system prepared

Classification model with NLP to Sentiments of two subreddits

Reddit PRAW API, Jupyter Lab

- Created an unstructured dataset by scraping over 12,000 posts from both subreddits
- Transformed data in preparation for modeling using feature engineering and NLP
- Identified topics that were strongly associated with subreddits using a logistic regression classifier
- Achieved a recall score of .6944 to address the class imbalance in the dataset

Hotdog or Not Hotdog

Jupyter lab, Streamlit

- Built and trained a convolutional neural network (CNN) on ~4,200 image files in 6 hours
- Co-created a Streamlit app that accurately classifies uploaded pictures as either hotdogs or not.

Successful Song Prediction with Features

Jupyter Lab, Github

- Cleaned and analyzed 250,000+ rows of Spotify data and built Random Forest, DNN, Logistic Regression, and Decision Tree Classifier models
- Trained a dense neural net model with 79% accuracy in predicting popular Spotify songs
- Collaborated with 3 data scientists over Github for a 20-minute stakeholder presentation

Regression model to predict home sale prices in Ames, IA

- Explored a Kaggle dataset of home sales from 2006 to 2010 provided by the Ames's Assessor's office
- Used data visualization and feature engineering techniques to analyze and manipulate data into a format usable for modeling
- Evaluated several models using linear regression and LASSO or Ridge regularization
- Developed a model that was able to predict housing prices with an R2 score of 0.97
- Stood 1st of all model submissions on a Kaggle competition

EDUCATION

General Assembly, NYC, USA – Remote

Jan 2024 - April 2024

Certificate of Completion, Data Science Immersive

Saurashtra University, Gujarat, India

April 2007 – April 2012

Bachelor of Engineering, Biomedical and Instrumentation Engineering

CERTIFICATES

Databricks

Certificate of Completion, [Databricks Fundamentals](#)

Databricks

Certificate of Completion, [Databricks Lakehouse Fundamentals](#)

Databricks

Certificate of Completion, [Generative AI Fundamentals](#)