

RIDWAN ALAM

DATA SCIENCE

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Skills

LANGUAGES

Python
JavaScript
TypeScript
HTML
CSS

PYTHON LIBRARIES

Pandas
Numpy
Scikit-learn
NLTK
SpaCy
Beautiful Soup
Streamlit

MACHINE LEARNING

Regression Models
Classification Models
Natural Language Processing

NEURAL NETWORK

YOLO
Darknet
TensorFlow

DATABASES

SQL
PostgreSQL
Snowflake
BigQuery

CLOUD

Heroku
Netlify
AWS
GCP
Google Colab
MSSQL

DATA VISUALIZATION

Matplotlib
Seaborn
Tableau

OTHER

GitHub
Expo
Jupyter Notebook
PyCharm

FRAMEWORKS

React
React Native
Expo

Experience

The General

Data Scientist

Remote
June 2020 to Current

- Built Generalized Linear Model (GLM) for converting transferred leads which generated \$23.3 million in profit
- Built bidding Logistic Regression Model decreasing \$658 Cost/Sale to \$352 and increasing 1.33 Revenue/Spend to 2.54
- Developing Natural Language Processing (NLP) model to support Claims through Sentiment Analysis and Topic Modeling
- Lead Model Performance meetings with Business Partners, Data Scientists, and Engineers to make modeling decisions
- Mentor and guide individuals transitioning into Data Science through the Data Science In-Residence program

HyperloopTT

US Public Affairs & Feasibility Studies Contributor

Remote
May 2021 to Current

- Educated US Public and Private sector entities through live presentations on the economic benefits of a Hyperloop system
- Developed relationships with Port of Virginia, Virginia Passenger Railroad Authority, and Virginians for High Speed Railroad

Freelance

Software Engineer

Remote
Aug. 2019 to Aug. 2020

- Portfolio Website: www.ridwanalam.com
- Built UI for COVID tracker mobile app using TypeScript, React Native, Expo SDK during Hack Quarantine 2020
- Deployed stock trading web application on Heroku built with Python, Flask, HTML, CSS, and PostgreSQL that allows users to buy and sell stock

Bright Power

Account Manager

New York, NY
Apr. 2019 to Aug. 2019

- Generated \$1 Million in solar and energy business for 40+ affordable housing clients
- Created proposals with energy efficiency and solar services ensuring CO2 reduction
- Developed financing options via Low-Income Housing Tax Credit from state agencies

Solar Landscape

Commercial Project Developer

New York, NY
Oct. 2018 to Mar. 2019

- Managed 54.4 MW commercial and industrial pipeline for solar PV solutions
- Prospected 100+ projects ranging from 100 kW to 1.5 MW for direct purchase or PPA
- Educated customers on Federal Tax Credit and State incentives to decrease project cost

Aramark

Energy Manager

New York, NY
Oct. 2017 to Apr. 2018

- Conducted study at Queen's College ensuring compliance with NYC Local Law 87
- Tested temperature, air flow, static pressure, and motor performance for 13+ AHUs
- Built Excel macros to increase data analysis efficiency by 98%

Ingersoll Rand

Energy Engineer

Chicago, IL & San Diego, CA
July 2012 to Aug. 2016

- Conducted 180+ studies in USA, Canada, and Mexico saving \$2.5 Million in total energy
- Developed \$1.5 million in revenue in new territories and \$2 million in current territories
- Achieved highest accreditation as Air Master from US Department of Energy

Data Science Projects

Autonomous Vehicle Object Detector

Dec. 2020

- Utilized Darknet Neural Network and YOLO Object Detector to create model to detect different classes of objects such as Traffic Signs and Lights and other vehicles
- Collected 1000+ images for each class with Google Open Images
- Trained model using YOLOv4 pre-trained weights to achieve higher Mean Average Precision

BTC Sentiment Analysis

Nov. 2020

- Scraped Tweets with SNScrape and Tweepy to determine Bitcoin sentiment analysis and correlation with the current and historical price
- Utilized Vader and TextBlob sentiment analysis to determine subjectivity of Tweet
- Observed Twitter topic discussions using LDA, NMF, LDA, and Corex topic modeling
- Deployed app via Streamlit for users to see current cryptocurrency sentiment

New York/New Jersey Flight Departure Delay Study

Oct. 2020

- Created model using data from Bureau of Transportation Statistics (BTS) determining flight departure delays from the New York/New Jersey metro area
- Utilized different classification modeling techniques such as Logistic Regression, Gaussian Naive Bayes, RandomForest, and Gradient Boosting
- Compared Accuracy, Precision, Recall, F1, and ROC-AUC curve to select the best model
- Displayed model with Tableau showcasing airports prone to departure delays

Fantasy Football Linear Regression Modeling

Oct. 2020

- Utilized Simple, LASSO, and Ridge regression modeling techniques to predict future points of a player based on the previous games' running average
- Scraped data with BeautifulSoup from Pro-Football-Reference
- Compared Train, Val, Test RMSE values to determine best model for future predictions

Education

Virginia Tech

B.S. Industrial Engineer 2012

Aug. 2008 to May 2012

Metis Data Science Bootcamp

Sept. 2020 to Dec. 2020

Completed self-designed data science projects from conception to presentation; including data collection, data management, exploratory data analysis, modeling, and visualizations

Core curriculum centered around Python, statistics, supervised and unsupervised machine learning, exploratory data analysis, databases, and visualization techniques

ACCET accredited 12-week immersive data science bootcamp focused on project oriented learning