

Arlington, VA
757-515-2229
ridwan102@gmail.com

Ridwan Alam

Linkedin.com/in/RidwanAlam
Github.com/Ridwan102
Portfolio Website: RidwanAlam.com

Skills

Programming Languages: Python, JavaScript, TypeScript, HTML, CSS

Data Science: Pandas, Numpy, Scikit-learn, NLTK, SpaCy, Beautiful Soup, Streamlit, Tableau, Matplotlib, Seaborn

Machine Learning: TensorFlow, Darknet, YOLO, Regression Models, Classification Models, Natural Language Processing (NLP)

Frameworks: Flask, React, React Native

Databases: SQL, PostgreSQL

Other Platforms: Heroku, Netlify, Expo, GitHub, Jupyter Notebook, Google Colab, Google Cloud

Professional Experience

Metis Data Science Bootcamp

September 2020 – December 2020

Data Scientist

Remote

- ACCET accredited 12-week immersive data science bootcamp focused on project oriented learning
- Completed five self-design projects from conception to presentation utilizing Python, statistics, supervised and unsupervised machine learning, data collection, databases, exploratory data analysis, modeling, and visualization techniques

Freelance

August 2019 - Present

Software Engineer

Remote

- 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

Bright Power

April 2019 – August 2019

Account Manager

New York, NY

- Generated \$1,000,000+ in new solar and energy business for 40+ affordable housing clients in New York City
- Created proposals with energy efficiency and solar consulting services ensuring multifamily buildings achieved CO₂ reduction
- Developed financing options via LIHTC (Low-Income Housing Tax Credit) from New York state and city agencies

Solar Landscape

October 2018 – March 2019

Commercial Project Developer

New York, NY

- Managed 54.4 Megawatt commercial and industrial pipeline for rooftop, ground mount, and carport solar PV solutions
- Prospected 100+ customer projects ranging from 100 kW to 1.5 MW for direct purchase or Power Purchase Agreement (PPA)
- Educated customers on Federal Tax Credit and State incentives such as SRECs to decrease project cost and payback

Aramark

October 2017 – April 2018

Energy Manager

New York, NY

- Conducted energy study at Queen's College (CUNY) ensuring its compliance with New York City Local Law 87
- Tested temperature, air flow, static pressure and motor performance for over 13 Air Handling units
- Built Excel macros to increase data analysis efficiency by 98%

Ingersoll Rand

July 2012 – August 2016

Energy Engineer

Chicago, IL & San Diego, CA

- Conducted 180+ energy studies in USA, Canada, and Mexico saving \$2.5 million in total energy with average savings of 29%
- 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

Python, TensorFlow, Darknet, YOLO

- Utilized Darknet and YOLO to create model to detect different classes of objects such as Traffic Signs and Lights and Cars
- 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

Python, Streamlit, Tweepy, Vader, TextBlob, Topic Modeling

- Scraped Tweets with SNScrape and Tweepy to correlate Bitcoin's sentiment with its 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 observe current cryptocurrency sentiment

New York/New Jersey Flight Departure Delay Study

Python, Tableau, Classification Modeling, Ensemble Models

- Created model using data from Bureau of Transportation Statistics determining flight departure delays from New York City
- Utilized different classification modeling techniques: Logistic Regression, Random Forest, and Gradient Boosting
- Compared Accuracy, Precision, Recall, F1, and ROC-AUC curve to select the best model
- Displayed model with Tableau showcasing airports most prone to departure delays

Education

Virginia Tech: Bachelor of Science - Industrial Engineering

August 2008 – May 2012