Rayan Yassminh, Ph.D.

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Motivated data scientist with background in computational science. Passionate about building machine learning models. Skills include predictive modeling, machine learning, data processing, data mining, problem solving, programming, Computing on AWS, strong attention to detail, and creative thinking.

• Experience in developing Statistical Machine Learning Models, Data Mining solutions for various industries and generating data visualizations using Python and MATLAB.
• Solid understanding of univariate and multivariate statistics, exploratory data analysis, and preprocessing data.
• Modeling supervised and unsupervised learning.
• Ability to work effectively with diverse team of co-workers and researchers, enthusiastic and self-motivated, flexible about adjusting to work schedules and teamwork needs.
• Ability to adapt to a fast pace and dynamic work environment with interpersonal, leadership and co-ordination skills.
• Strong analytical skills with the ability to collect, organize, analyze, and disseminate significant amounts of information with attention to detail and accuracy.
• Data mining and NLP.
• Computing in AWS: Build, tune, and deploy an end-to-end prediction model using Amazon SageMaker,MLOps.

EDUCATION

Postgraduate Program University of Texas at Austin 2022
Field: Data Science and Business Analytics.
Ph.D. University of Missouri, Columbia 2019
Field: Geophysics, Seismology
M.Sc. University of Missouri, Columbia 2013
Field: Geological sciences, Seismotectonics.
B.Sc. Damascus University 2000
Field: Applied geophysics

EXPERIENCE

• Data science intern in Data Glacier (Remote): 2022_2023
Microsoft Power BI, Statistical Data Analysis, Tableau, Algorithms, Communication, Forecasting Modeling, Data Analysis, Machine Learning.
• Research Assistant University of Missouri-Columbia: 2011-2021

Conducting research, leading, and mentoring groups, programing, applying statistical and mathematical models, researcher, Linux, presenting results in conferences and publications.

• Teaching Assistant University of Missouri-Columbia: 2013-2016
Teaching Physical Geology and Environmental Geology in class and in lab; mentoring and supervising students; evaluating student progress and coming with strategies to improve their progress.

• Geophysicist/Seismologist in Earthquake Research Center: 2001-2010
Working in groups, field work, instrumentation, leading groups, analyzing time series data, dealing with big data, data analyzing, statistics, excel, remote sensing, GIS, Linux, windows, and presenting work for public.

TRAINING

• Great Learning: Data Science on Cloud with AWS 2023
• Advanced Deep Learning with Keras, Data Camp 2021
• Python programming, 5 courses Data Camp 2021
• SQL for Data Science Specialization,4 courses (Coursera) 2021
• Deep Learning/AI Specialization, 5 courses Coursera 2021
• Training courses in Radar Remote Sensing at University of Twente, Netherlands 2010

PROJECTS

- **Seismic Hazard Projects:** The objective is to predict local seismic site effects by applying seismic methods in addition to statistical models using Python, Pandas, statistics, logistic regression, linear regression, and using GeoPandas for geospatial analysis.
- **Convolution Neural Network**: The objective is to predict the arrival times of regional seismic waves (CNN find the trend in changing the frequency and amplitude of time series).
- **Classification Project:** Analyze the data of visa applicants, build a predictive model to facilitate the process of visa approvals, and based on important factors that significantly influence the visa status recommend a suitable profile for the applicants for whom the visa should be certified or denied. EDA, Data Preprocessing, Customer Profiling, Bagging Classifiers (Bagging and Random Forest), Boosting Classifier (AdaBoost, Gradient Boosting, XGBoost), Stacking Classifier, Hyperparameter Tuning using GridSearchCV, Business insights.
- **Coffee Beans Recommendation System**: The objective is to predict the customer choice of coffee based on how they review the coffee and based on their profile. Skills: Scraping data from websites, EDA and developing a machine learning model in Python to predict consumer behavior using Natural Language Processing (NLP), sentiment analysis, and xgboost.
- **Renewable Energy**:"ReneWind" is a company working on improving the machinery and processes involved in the production of wind energy using machine learning and has collected data of generator failure of wind turbines using sensors. The objective is to build various classification models, tune them and find the best one that will help identify failures so that the generator could be repaired before failing/breaking and the overall maintenance cost of the generators can be brought down. Up and downsampling, Regularization, Hyperparameter tuning.
- **Stocks Market**: Analyze stocks data, grouping the stocks based on the attributes provided, and sharing insights about the characteristics of each group. EDA, KMeans Clustering, Hierarchical Clustering, Cluster Profiling.