+91 9902371385
azamsayeed123@gmail.com
https://www.linkedin.com/in/mohammed-azam-sayeed-970311123

Mohammed Azam Sayeed

Junior data scientist/Entry level data scientist

Certified Python Machine Learning and Data Science professional. Enthusiastic learner and adaptable individual Dedicated to solving multidisciplinary real-world business problems. Skilled in Artificial intelligence, Machine Learning, python programming, Image processing, Sentiment Analysis, Data extraction and cleansing. Seeking a junior data scientist/Entry level position to contribute for an organization's development.

KEY SKILLS

Data Science • Python Programing • Predictive/Statistical Modelling • Machine Learning Algorithms • Chat bots • Speech Recognition • Deep Learning Techniques • Image Processing • Sentiment Analysis • Data mining • text mining • data visualization • web scrapping • Technical writing skills • Data wrangling • Programming skills • creative writing skills • Researching Skills • Programming skills

TECHNICAL SKILLS

- **Packages**: Scikit-Learn, Numpy, Scipy, Pandas, NLTK , Textblob (Sentiment Analysis), BeautifulSoup and urllib (web scraping), Tensorflow framework (CNN model)
- **Image Processing libraries**: skimage, OpenCV
- **Data Visualization Libraries**: Matplotlib, seaborn, plotly
- **Statistics/Machine Learning**: Statistical Analysis, Linear Regression ,gradient descent, Logistic Regression, Decision Tree, Naive Bayes, SVM, Hyper parameter optimization using Grid Search, Kmeans clustering, hierarchical clustering, Association rule Mining, Ensemble Methods (Bagging and Boosting), Random Forest, Feature Importance, Gradient, AdaBoost, XGBoost, KNN, SVM, K Means, Association Rule Mining, Dimensionality Reduction, PCA, Scaling, LDA, Time Series Analysis, ARMA,ACF & PACF, stationary, p-value, forecasting, Holt winter Model, fbprophet, Neural Networks, ANN, CNN, Cross validation
- Database Management Systems Concepts and SQL
- Worked with core java, Log4j/SLF4J Logging, Maven, Oracle WebLogic Server, Tortoise SVN, JIRA, Jenkins Continous Integration, Karate testing Framework, Unix, Spreadsheets
- Experience in Python, python Regex, Image processing methodologies, and Learning Tensor flow LSTM –RNN deep learning Model
- Prior Experience with Matlab image processing, Cisco Packet Tracer
- Communication skills, Presentation skills, technical journaling, Creative Writing and Researching skills

PROFESSIONAL EXPERIENCE

NETCRACKER PVT LTD, BENGALURU

SOFTWARE ENGINEER (JAVA based) Bengaluru, IN | Aug '16 - Present

PRESENT PROJECT: Telus Falcon GreenField (Telecom)

Telus is Canada's fastest-growing national telecommunications company with 13.9 million customer connections, TELUS provides a wide range of communications products and services, including wireless, data, Internet protocol (IP), voice, television, entertainment, and video, and is Canada's largest healthcare IT provider. Netcracker offers a range of business functionality to Telus Communication Falcon project to ensure seamless delivery of various Internet, Voice, TV , smart IoT systems services and promotions to cater and engage with Canada telecom

Areas of responsibility

- Dedicated BE Java Resource for the development of multiple CRs for successive releases deliveries per month and contributed heavily to the regressive fixing.
- Handling Netcracker Business Implementation of Telecom Domain Concepts like Order Processing Framework, Order management, Life Cycle Management, Product Offering Catalogue, Sales Order Management inclusive of BPI and OI, requirement delivery, and issue assessments, and necessary changes.
- During Increase in workload, Provided support to Telus TAFT project as roles similar to Business Analysts such as Analyzing requirement, proposed implementation, Validation documents for Client, Test cases drafting and proper design documentation for Telecom Business catered technology namely POC dealing with Offerings, offering structure

characteristics, Order structure rules, promotions and promotion rules, Decomposition Rules, product specification, interaction, etc. And in Roles as system engineer by Contributing to Maintaining Retrofit changes of branches to sync with CR changes from Telus side to Netcracker CR deliveries.

- During Increase in workload, Provided support as roles similar to Business Analysts such as Analyzing requirement, proposed implementation, Validation documents for Client, Test cases drafting and proper design documentation for Telecom Business catered technology namely POC dealing with Offerings, offering structure etc
- Collaborating on all Stages of System development lifecycle, from being involved in requirements gathering,software development and Testingto supporting production releases.
- Collaborating and extensive documentation with other developers and performance engineers to enhance supportability.

Key Achievements

- Received "You've made the Difference" award from NetCracker for Duration July 2018 to Sept 2018 for ensuring delivery of TAFT related work, E2E, and BVT Root cause assessments of defects and corresponding bug fixing.
- Received "You've made the Difference" award from NetCracker for Duration July 2019 to Oct 2019 for Ensuring all the high priority defects and dev tasks were closed within due dates and made sure the overall quality of delivery was maintained.

EDUCATION

School of Engineering and Technology, Jain University

Bachelors in Computer Science Engineering Bengaluru, IN | Jul '12 - Jun '16

- **CGPA: 9.314/ 10 (1st Rank)**

ACADEMIC PROJECT: Estimation of Nitrogen Content in Rice Leaves and Weed Detection in Crop Row
Internship (8th Sem): NETCRACKER Technologies

- **Best Outgoing Student** for 2016 CSE batch
- Awarded **Gold Medalist** as valedictorian of batch
- Awarded **Best Final year Project and best Final Year Technical Seminar** of 2016 batch
- Won First place in Inter college Android development Competition and team inter-college programming events on Web designing, cisco packet tracer, and DBMS designing.
- Won various Oratory style Competitions like debates, public presentation, impromptu, etc.

CERTIFICATIONS/ ARTICLES

Python for Data Science Professional | Edureka certification
with Grade A, Certificate ID: BMBCBHZQ
Final Capstone Project 1: PHARMA - Classify plant leaves by various classifiers from different metrics of the leave and chose the best classifier for future reference.
Final Capstone Project 2: FMCG- Decide Countries whose export of food grains is low in comparison to countries performing well using supervised learning techniques like Kmeans, Hierarchical clustering with PCA.
Final Capstone Project 3: Social Media - Classify if the article will be shared based on features of Mashable collected data of articles using Feature Scaling, Feature importance using Gradient Boosting.

Python for Data Science Training Course to achieve professional excellence | Intellipaat certification
Certificate ID: 31679-120153-63754
Final Capstone Project 1: TELECOM- Customer Churn - Predict customer attrition for a telecom domain company.
Final Capstone Project 2: Real Estate - Python web scrapping data collection and linear regression for house price prediction
Final Capstone Project 3: Concept- Basic PYSPARK theoretical concepts

Data Science Training | Internshalla Certification designed by Analytics Vidhya
Certificate ID: 7C783E5A-E49D-D379-D442-29A572BFED01 , with 95% score

Machine Learning Training | Internshalla Certification designed by Analytics Vidhya
Certificate ID: 02963437-81A7-0291-4EAB-CC5F19A17B40 , with 93% score
Final Capstone Project: Real Estate - Exploratory Data Analysis on the Chennai House Pricing Dataset

Articles published on Medium:
https://medium.com/@azamsayeed123
Medium article's gist git Link: https://gist.github.com/MohdAzamSayeed
Published Articles also on **Analytics Vidhya Medium publication** platform for data science as Writer

---

PROJECTS/ PUBLICATIONS

1) Tracking the Spread of COVID-19 Cases in India using Data Visualizing and Forecasting Techniques

Abstract: Paper presents various data visualization implementation using plotly and matplotlib libraries to extract insights from web scrapped Covid-19 data in details for India in particular, This can help access and track the Covid-19 cases in India across states and take preemptive steps to reduce risk of lives and economy. This paper also demonstrates the implementation of various forecasting models such as holt winter, fbprophet, ARIMA models which can help countries governments and health workers to take steps to curb the forecasted growth of Covid cases.

DOI / Link: http://doi.org/10.22214/ijraset.2020.5076

2) Accelerated Diagnosis and Reporting of Patients using Analysis of Bulk Chest X-ray Images to Aid Impacted Healthcare System during Covid19

Abstract: The Paper discusses the Machine Learning based Methodology with implementation to assist health workers to perform bulk reporting of patients on Kaggle Chest X-ray images into Normal and Pneumonia diseased clusters which can assist overburdened health system especially during covid19 and pneumonia being known the symptom of Covid, can potentially detect Covid infections in clusters. Results of clusters are Bulk reported with chest scan and corresponding patient details to facilitate faster and more convenient patient reporting. The labeled clusters are also used to model classification models such as SVM with PCA dimensionality reduction, and TensorFlow CNN architecture model to classify newer clusters of patients saved in pickle format for future uses.

DOI /Link: http://doi.org/10.22214/ijraset.2020.5168

3) Estimation of Iron using Multiple Linear Regression Models

Abstract: The paper presents an alternative methodology to the colorimetric estimation of Iron using coloring reagents. Iron is one of the most crucial requirements for both plants and human health which makes determining the concentration of Iron useful in many areas of research and technology. The methodology uses data/image collection from the chemical procedure, feature extraction, feature selection, data visualization via heatmap, scatter matrix for variable correlations and Building accurate multiple linear regression models to Estimate iron concentration in the sample based on reagent coloration (KCNS, FAS, Nitric acid)

DOI /Link : http://doi.org/10.22214/ijraset.2020.2113

4) Detecting Malaria from Segmented Cell Images of Thin Blood Smear Dataset using Keras from Tensorflow

Abstract: The paper presents generalized methodology with python implementation to detect malaria from segmented Cell images of Thin blood Smear dataset using Convolution Neural network Architecture having multiple layers of Relu, pooling, Fully connected Layers provided by Keras class in Tensorflow. The paper discusses the method of data segregation, data preparation using Image Generator class, Training, and validation of the model in Tensorflow CNN models.

DOI /Link : http://doi.org/10.22214/ijraset.2020.1109

5) Analysis of Urine Samples to Classify as Hydrated or Dehydrated using Image Processing and XGboost Model

Abstract: Aims to Classify patient urine image samples into hydrated or dehydration to provide an alternative to Time-consuming, labor-intensive traditional Lab testing procedure to track patient's body's hydration levels linked to several ominous disorders. The Proposed Methodology involves Image processing Techniques such as image acquisition,color transformation, image segmentation and feature extraction implemented using skimage from python, and Machine Learning Ensemble Boosting XGBoost improvised using Feature importance and Feature Scaling.

DOI /Link : http://doi.org/10.22214/ijraset.2020.1053

6) Determining Suitable Conditions required for Finger Millets Seeds Germination using Decision Tree Algorithm

Abstract: The paper demonstrates a methodology to determine optimal conditions required for the germination of crops for instance Ragi crops using data generated from Multiple Sensors on Ardunio Uno for assessing Environmental factors like Temperature, Soil Moisture, Light and Humidity. Data is analyzed using the Decision Tree Model in python. These insights from formed decision tree ruleset, along with feature importance can be utilized by farmers and agricultural scientists to enhance crop productivity, yield, and revenue generation.

DOI /Link : http://doi.org/10.22214/ijraset.2020.2009

7) Association Rule Mining of Inactive Ingredients in Drugs

Abstract: Paper presents Methodology to extract strong association rules by frequently occurring inactive ingredients combination using Apriori principle to a better formulation of drugs, by avoiding unnecessary inactive ingredients, which have been documented to be potential allergens and have adverse side effects in some cases for patients. Implementation in Python for proposed Methodology generates insights that can be used by pharmaceutical companies to better formulated new precision drugs based on popularity and effectiveness drug brands in the market using Examples of acetaminophen, ibuprofen, and aspirin generic drug available medicines brands in US market.

DOI /Link : http://doi.org/10.22214/ijraset.2020.1068

8) Understanding Viewers Sentiment on Skin Whitening Glutathione Product Review using YouTube Comments

Abstract: Paper shares research on Indian's sentiment analysis on using glutatione for Skin whitening from youtube comments collected by selenium automation, textblob nlp framework,and custom designing Naïve bayes classifier for classification of newer context comments in python

DOI /Link: http://doi.org/10.22214/ijraset.2020.3066

9) Detecting Crows on Sowed Crop Fields using Simplistic Image processing Techniques s by Open CV in comparison with TensorFlow Image Detection API

Abstract: paper discussed image processing based implementation and methodology inclusive of color transformation,image segmentations,noise reduction and morphological operations by Open CV, in comparison with pre-trained COCO TensorFlow Image Detection API(YOLO) to detect birds such as crows in crop fields to locate and deploy efficient scarring techniques to minimize the loss of crops by birds and impact on bird biodiversity.

DOI /Link : http://doi.org/10.22214/ijraset.2020.3014

Existing Publication during Undergraduate Studies:

1) Detection of Weeds in a Crop Row Using Image Processing (Matlab, 2016)
Abstract: Weed control is essential and critical operation and can affect crop yield. Fertilizers play an important role in weed control but their role is under criticism due to perceived excessive use and potentially harmful to the environment. This paper proposes two methods Firstly, for crop row detection the image processing consists of three main processes: image filtering, image segmentation using Otsu's method, and crop row detection. Secondly, further classification between weed and crop, is carried out by using box plotting technique, implemented prototype software in matlab.

Link: https://www.researchgate.net/publication/339416227_Detection_of_Weeds_in_a_Crop_Row_Using_Image_Processing

2) Estimation of Nitrogen in Rice Plant Using Image Processing and Artificial Neural Networks (Matlab, 2016)
Abstract: This paper presents a prototype which identifies the 4-panel LCC and Spad meter values equivalent of rice plants using image processing techniques and artificial neural networks. Images of rice leaves were captured by digital camera and processed through image acquisition, color transform, image enhancement and feature extraction procedures. Suitable Features are extracted which serves as input to neural network trained to predict the LCC panel equivalent of leaf. Artificial neural network is trained using images of rice leaf with the corresponding classes using backpropagation method implemented prototype software in matlab.

Link:https://www.researchgate.net/publication/339416174_Estimation_of_Nitrogen_in_Rice_Plant_Using_Image_Processing_and_Artificial_Neural_Networks

3) Techinal Seminar : Brain Computer Interface controlled wheel Chair the Next Generation User Interface:
Abstract: This presentation gives demonstration of using brain waves generated from eeg helmet and making decision based on thought/brain waves to Assist people navigating through wheel chair.
Link:https://www.researchgate.net/publication/341344994_BRAIN_COMPUTERINTER_FACE_CONTROLLED_WHEELCHAIR_THE_NEXT_GENERATION_USER_INTERFACE
Won **best Technical Seminar presentation** for 2016 CSE batch

4) National Conference: Image Procesing Based Methodologies for Precision Agriculture (2017)
Presented conference paper in National Conference - JNANA CHILUME -2017 on 25th March 2017 in Recent Advances in Computer Sciences & Information Technology (RACSIT-17)
Won the **Best Paper Presentation Award** in RACSIT National Conference.