Muhammad Mudasser Afzal

(Data Science/Machine Learning Enthusiastic)

House No. 233, First Floor, Street No.40A, I-9/4 Islamabad * +92 332 9461997 * Mudasserch1@gmail.com | MudasserAfzal@ieee.org



EDUCATION

Pakistan Institute of Engineering and Applied Sciences (PIEAS), Islamabad, Pakistan

BS Computer and Information Science

Oct 2015-June 2019

Coursework includes Object-Oriented Programming, Operation Research, Data Structures, Computer Networking, Database Management, Internet App Development, Pattern Classification & Recognition, Artificial Intelligence CGPA: 3.06/4.00

PROFESSIONAL EXPERIENCE

National Engineering and Scientific Commission (NESCOM), Islamabad, Pakistan

Student Intern, July 2018 – Sep 2018

- Studied about Artificial intelligence and CNN as a part of the team
- Executes neural networks and implementing this code on raspberry pie 3.

Pakistan Institute of Nuclear Science and Technology (PINSTECH), Islamabad, Pakistan

Student Intern, July 2017 - Sep 2017

- Studied enterprise network already installed in the organization; optical switches and routers.
- Designed a network topology diagram with available limited bandwidth.

TECHNICAL SKILLS

- **Python:** Data wrangling, Exploratory data analysis using anaconda (Spyder and Jupyter Notebook).
- Statistics/Machine Learning: Statistical Analysis Linear/Logistic Regressor, Clustering, Feature reduction.
- **Data Mining:** Python Numpy, Pandas, Sklearn, Preprocessing, Scipy, NLTK
- Packet tracer: Cisco Certified Network Associate Static and Dynamic Routing, VLANs, OSEFP
- Adobe Photoshop: Skills in photo enhancement, inserting effects, designing logos and posters

PROJECTS

FINAL YEAR PROJECT

- Authorship Attribution for Urdu Articles using Deep Learning: Performed Data wrangling using NLTK
 and Spacy for removing punctuations and noise in data. Along with this implemented Support vector classifier,
 random forest and KNN using GridsearchCV. The idea of our project is to predict the author's name based on
 the specific writing style.
 - To further improve our results I have tried to implement deep neural networks. Neural Network will help to extract features in more depth.

OTHER PROJECTS

• Image Classification with HyperSpectral Images: This is my recent project working under the supervision of Dr Waqas Sultani in which we have a dataset of various fake and real fruit images. Our task is to classify that the given fruit is real or fake using hyperspectral cameras.

- Solar Detection using AMS Dataset Kaggle: Solar Detection is an open competition by Kaggle. Performed Exploratory Data analysis along with Applied basic regression techniques on the dataset. implemented Long Short Term Memory (LSTM).
- Automatic Segmentation of Supraspinatus Tendon from MRI of Human Shoulder:

 There is no proper, accurate and efficient, muscle segmentation technique for the diagnosis of muscle damage in order to make the right decision for surgery or do a post-surgery evaluation. So the basic objective or idea of this project is to develop an automatic segmentation method to extract the two-dimensional (2D) configuration for Supraspinatus SSP tendons from MRI images.
- Face Recognition System: the AT&T Database was used which consisted of 40 sets of images, each set comprising of 10 images of test-person with a different style and poses. HOG (Histogram of Gradient) is used as a tool for feature extraction.

ACHIEVEMENTS AND AWARDS

- Coursera certification on "Text Retrieval" by Illinois University.
- Coursera certification on "Machine Learning" by Stanford University.
- Certified Microsoft Excel and Word Specialist in 2016
- Got best Young Professional Volunteer Islamabad section award for the year 2019.
- Honour to be Elected as IEEE Brand Ambassador of Region 10 (Asia Pacific).
- Elected as a student ambassador of international online coding competition IEEEXtreme 12.0
- Elected as a student ambassador of online mobile application development competition IEEEmadc
- Received best ambassador award at All Pakistan IEEE Student /YP /WIE Congress 2017 held in Superior University, Lahore, Pakistan.

REFERENCES

Reference will be provided as per request