MUHAMMAD ALLAH RAKHA

AUTHOR
DATA SCIENTIST
SYSTEM SOFTWARE DEVELOPER
DESKTOP APPLICATION DEVELOPER
MOBILE APPLICATION DEVELOPER
FULL STACK WEB DEVELOPER

AUTHOR (BOOKS)

Book_1: Way To The Advanced Computer Data Science.
Book_2: Programming In 15 Language.
Book_3: Programming In Elixir Language.
Book_4: Programming In Fortran-90 Language.

Explanation

- The book_1: (Data science, Artificial Intelligence, Machine Learning, Deep Learning) all topics and with in Python Codes.
- The book_2: (C,C+,C#,Java,JavaScript,Python,Ruby,R,Rust,Go,Julia,Lua,Swift,PHP,Perl) language .
- The book_3: Elixir Programming Language (All basics and Programming Codes) .
- The book_3: Fortran-90 Programming Language (All basics and Programming Codes).
- In which have are provide the information about subject topic and programming codes. All books are designed in Interactive Style.

EDUCATION BACKGROUND

FAST-NUCES UNIVERSITY PESHAWAR CAMPUS
Bachelor of Computer Science (BCS-4 year)
Year : 2019 - 2023

KIPS COLLEGE GARDEN TOWN LAHORE
Intermediate of Computer Science (ICS-2 year)
Year : 2017 - 2019

COUNTRY LANGUAGE

- Urdu
- Saraiki
- English UK
- German

CONTACT DETAILS

Phone: +92 349 0175636
Youtube: aaaa stark
Google Search: aaaa stark
Github: aaaastark
Linked IN: AAAA STARK
Website: https://aaaastark.herokuapp.com
Address: H.No. 257 , Raza Block Allama Iqbal Town
Email: 4444stark@gmail.com

Books: https://z-lib.org/
Search the Author name is Muhammad Allah Rakha

PERSONAL WORK EXPERIENCE

COMPUTER SCIENCE

- Data Science (Python,R)
- Artificial Intelligence (Python,R)
- Machine Learning (Python,R)
- Deep Learning (Python,R)
- Probability and Statistics (Python,R)
- Data Structure (C++)
- Desktop Application Developer (C#, Java, Electron JS, React JS, Flutter, Ionic, Meteor JS, HTML, JavaScript, CSS, Node JS)
- Mobile Application Developer (React Native, Flutter, Ionic, Meteor JS, Cordova, HTML, JavaScript, CSS, Node JS)
- Full Stack Web Developer (React JS, Angular JS, Express JS, Flutter, Ionic, Meteor JS, HTML, JavaScript, CSS, Node JS)

PRGRAMMING/SCRIPTING/MARKUP LANGUAGES

- Python
- R
- Julia
- JavaScript
- TypeScript
- Shell Script
- PHP
- Elm
- Go
- Elixir
- Fortran-90
- Kotlin
- Rust
- Ruby
- Dart
- Perl
- Swift
- Java
- HTML
- CSS
- Node JS
- C++
- C#
- C
- Vanilla JavaScript

DATABASE LANGUAGES

- MongoDB
- MySQL
- SQL
- SQL Alchemy
- SQLITE

ASSEMBLY LANGUAGES

- SISC (16-bits, 32-bits, 64-bits) Architecture
- RISC (RISC-V) Architecture

The use NASM (DOSBOX) and GNU Compiler for SISC. The use TinyEMU emulator and Ripes simulator for RISC

WEBSITE/MOBILE/DESKTOP APPLICATION FRAMEWORK

- Django
- Bootstrap
- Flask
- Tailwind CSS
- React JS
- JQuery
- React Native
- Meteor JS
- Angular
- Flutter
- Angular JS
- Electron JS
- Ionic and Capacitor
- Cordova

PYTHON AND R LANGUAGE LIBRARIES

- TensorFlow
- Scikit Learn
- Scikit Image
- Open CV
- Theano
- Plotly
- Apache Spark
- Selenium
- Keras
- Web2py
- Pandas
- Ggraph
- PyTorch
- Numpy
- Ggplot2
- SciPy
- ScraPy
- Matplotlib
- Seaborn

COMPUTER SCIENCE SKILLS

OPERATING SYSTEM

- Microsoft Window 10
- Ubuntu Linux
- Kali Linux
- Window 95,2000,XP,7,Vista,8
- Unix
- Linux
- DOS

INTEGRATED DEVELOPMENT ENVIRONMENT (IDE)

- Visual Studio
- Visual Studio Code
- PyCharm
- IntelliJ IDEA
- WebStorm
- RubyMine
- GDB Debugger

SYSTEM AND WEB-BROWSER SOFTWARE/APP

- VMWare Workstation Pro15
- Git and Github
- Canva
- Figma
- Adobe InDesign
- WordPress
- HeroKu
- Microsoft Word/PowerPoint/Excel/Database/Publisher
- Carrd
- Netlify
- Android Studio

PROJECTS (PERSONAL WORK)

WEB DEVELOPMENT (PYTHON_DJANGO & REACTJS & JAVASCRIPT & HTML & CSS & SQLITE & HEROKUAPP)

Personal Portfolio Website of AAAASTARK & MUHAMMAD ALLAH RAKHA: **JUNE,4,2021**

- Personal Website of AAAASTARK & MUHAMMA ALLAH RAKHA. The Personal Portfolio website is developed by using the ReactJS and with Django Python Framework. This website is made for Resume, Books, Services, Project, and information about AAAASTARK.
- Backed we use the database of Django SQLite Python.

Python Libraries and Web Deployment:

- Asgiref
- Dj-Database-Url
- Django-Heroku
- Django-Crispy-Forms
- Gunicorn
- Psycopg2
- Sqlparse
- Whitenoise
- For Deployment (Heroku, Heroku CLI, GitHub)
- Pytz
- Django

Website Link: https://aaaastark.herokuapp.com/

GitHub Link: https://github.com/aaaastark/AAAASTARK_Website_Personal.git

DESKTOP APPLICATION (ELECTRON & JAVASCRIPT & HTML & CSS & NODEJS & MYSQL DATABASE)

AAAA STARK DESKTOP APPLICATION: **JULY,30,2021**

- AAAA STARK desktop application is make, the based of AAAA STARK website of module visualization. The database is online. We use the Programming Language and Programming Framework for this project development.
- Language: HTML & CSS & JAVASCRIPT & NODEJS & MYSQL DATABASE
- Framework: ELECTRON JS

ELECTRON LIBRARIES AND NODEJS LIBRARIES:

- Electron
- MySQL Database
- Sequelize
- Electron-Forge Package
- Electron-Forge Make
- Electron-Forge Publish
- Electron-Squirrel-Startup
- Electron-Squirrel-Startup
- Electron-Forge/Cli
- Electron-Forge/Maker-Deb
- Electron-Forge/Maker-Rpm
- Electron-Forge/Maker-Squirrel
- Electron-Forge/Maker-Zip

GitHub Link: https://github.com/aaaastark/AAAASTARK-DESKTOP-APPLICATION.git

MOBILE APPLICATION (CORDOVA & JAVA & JAVASCRIPT & HTML & CSS & NODEJS) **AUGUST_20_2021**

AAAA STARK MOBILE APPLICATION:

- AAAA STARK moblie application is make, the based of AAAA STARK website of module visualization. The database is online. We use the Programming Language and Programming FrameWork for this project development.
- Language: JAVA & HTML & CSS & JAVASCRIPT & NODEJS
- FrameWork: CORDOVA
- Database: MYSQL

CORDOVA LIBRARIES AND JAVA LIBRARIES:

- Cordova
- Cordova-Android
- Cordova-Plugin-Whitelist
- Keytool
- Jarsigner
- Zipalign

GitHub Link: https://github.com/aaaastark/AAAASTARK-MOBILE-APPLICATION.git

DESKTOP APPLICATION (ELECTRON & JAVASCRIPT & HTML & CSS & NODEJS) **JULY,26,2021**

SOLAR SYSTEM 3D:

- 3D Solar System is make, the based of 3D Module Blue Visualization. We use the Programming Language and Programming Framework for this project development.
- Language: HTML & CSS & JAVASCRIPT & NODEJS
- Framework: ELECTRON JS

ELECTRON LIBRARIES AND NODEJS LIBRARIES:

- Electron
- Electron-Builder
- Electron-Forge Package
- Electron-Forge Make
- Electron-Forge Publish
- Electron-Squirrel-Startup
- Electron-Squirrel-Startup
- Electron-Forge/Cli
- Electron-Forge/Maker-Deb
- Electron-Forge/Maker-Rpm
- Electron-Forge/Maker-Squirrel
- Electron-Forge/Maker-Zip

GitHub Link: https://github.com/aaaastark/3D-SOLAR-SYSTEM.gitt

PROJECTS (PERSONAL WORK)

MACHINE LEARNING (PYTHON) **AUGUST,24,2021**

Life Expectancy Prediction:

- Life expectancy refers to the average age a person is estimated to live and is an important factor to determine the population health of any country. In the pre-modern world, Life expectancy was very less close to about 30 years but after 19th Century life expectancy started to increase and it nearly doubled.
- The project tries to create a model based on data provided by the World Health Organization (WHO) to evaluate the life expectancy for different countries in years. The data offers a timeframe from 2000 to 2015.

Python Libraries and Dataset:

- Sklearn, Pandas, Plotly, Seaborn, Scipy, Pycounty_Convert, Matplotlib, Numpy. Life Expectancy Data (.csv)

GitHub Link: https://github.com/aaaastark/Life_Expectancy_Predication.git

MACHINE LEARNING (PYTHON) **AUGUST,25,2021**

Breast Cancer Analysis:

- Breast cancer (BC) is one of the most common cancers among women worldwide, representing the majority of new cancer cases and cancer-related deaths according to global statistics, making it a significant public health problem in today's society.
- The dataset it is contains 596 rows and 32 columns of tumor shape and specifications. The tumor is classified as benign or malignant based on its geometry and shape. Features are computed from a digitized image of a fine needle aspirate (FNA) of a breast mass, which is type of biopsy procedure. They describe characteristics of the cell nuclei present in the image.

Python Libraries and Dataset:

- Sklearn, Pandas, Subprocess, Matplotlib, Numpy. Data (.csv)

GitHub Link: https://github.com/aaaastark/Breast_Cancer_Analysis.git

MACHINE LEARNING (PYTHON) **AUGUST,26,2021**

Twitter Sentiment Analysis:

- Sentiment analysis, also referred to as opinion mining or emotion extraction is the classification of emotions within a textual data.
- Twitter is a social media platform that has been mostly used by people to express emotions for particular events.
- We have collected tweets for a number of events, analyzed them using a number of Machine Learning algorithms like Naïve Bayes, SVM, Random Forest classifier and LSTM and compared the results.

Project Pipeline:

- Import Necessary Dependencies, Necessary Setting, Read and Load the Dataset, Pre-Process dataset, Split train and test, Word2Vec, Tokenize Text, Label Encoder, Embedding layer, Build Model, Compile model, Callbacks, Train, Evaluate, Predict, Confusion Matrix, Classification Report, Accuracy Score and Save model.

Python Libraries and Dataset:

- Sklearn, Keras, Pandas, Gensim, Seaborn, Scipy, NLTK, Matplotlib, Numpy, Pickle. Sentiment140 Dataset (.csv) which consists of 1,600,000 tweets

GitHub Link: https://github.com/aaaastark/Twitter_Sentiment_Analysis.git

MACHINE LEARNING (PYTHON) **MAR,10,2021**

Detecting Fake News:

- A type of yellow journalism, fake news encapsulates pieces of news that may be hoaxes and is generally spread through social media and other online media. This is often done to further or impose certain ideas and is often achieved with political agendas. Such news items may contain false and/or exaggerated claims, and may end up being viralized by algorithms, and users may end up in a filter bubble.

Python Libraries and Dataset:

- TfidfVectorizer: TF (Term Frequency) and IDF (Inverse Document Frequency)

GitHub Link: https://github.com/aaaastark/Detecting_Fake_News_Python_Project.git

PROJECTS (PERSONAL WORK)

MACHINE LEARNING (PYTHON) **MAR,2,2021**

Detecting Parkinson's Disease:

- Parkinson's disease is a progressive disorder of the central nervous system affecting movement and inducing tremors and stiffness. It is a neurodegenerative disorder affecting dopamine-producing neurons in the brain.

Python Libraries and Dataset:

- Scikit-learn, Numpy, Pandas, and XGBoost

GitHub Link: https://github.com/aaaastark/Detecting_Parkinson-s_Disease_Python_Project.git

MACHINE LEARNING (R) **APR,1,2021**

Customer Segmentation:

- Customer Segmentation is the process of division of customer base into several groups of individuals that share a similarity in different ways that are relevant to marketing such as gender, age, interests, and miscellaneous spending habits.
- Companies that deploy customer segmentation are under the notion that every customer has different requirements and require a specific marketing effort to address them appropriately.

Python Libraries and Dataset:

- K-Mean Clustring

GitHub Link: https://github.com/aaaastark/Customer_Segmentation_R_Project.git

DEEP LEARNING (PYTHON) **MAR,18,2021**

Image Classification:

- The classification problem is to categorize all the pixels of a digital image into one of the defined classes.
- Image classification is the most critical use case in digital image analysis.
- Image classification is an application of both supervised classification and unsupervised classification.

Python Libraries and Dataset:

- Keras, TensorFlow, Matplotlib, Numpy. CIFAR-10 (dataset)

GitHub Link: https://github.com/aaaastark/Image_Classification_and_Convolution_Neural_Network.git

DEEP LEARNING (PYTHON) **MAR,19,2021**

Convolutional Neural Networks:

- Convolutional Neural Networks, like neural networks, are made up of neurons with learnable weights and biases. Each neuron receives several inputs, takes a weighted sum over them, pass it through an activation function and responds with an output.
- The whole network has a loss function and all the tips and tricks that we developed for neural networks still apply on Convolutional Neural Networks.

Python Libraries and Dataset:

- Keras, TensorFlow, Matplotlib, Numpy. CIFAR-10 (dataset)

GitHub Link: https://github.com/aaaastark/Image_Classification_and_Convolution_Neural_Network.git

WEB SCRAPING (PYTHON) **AUGUST,20,2021**

Web Scraping Site (https://www.thestar.com.my):

- The Star | Malaysia News: National Regional and World News
- The website was recognized in 2014 as one of the best in Asia by the World Association of Newspapers and News Publishers (WAN-IFRA).
- Simply build a web scraper to collect all the review information from all the web pages of this site, and store it in a data frame.

Python Libraries and Created Dataset:

- Pandas, Urlopen, Request, BeautifulSoup, Numpy. Thestar_database (.csv)

GitHub Link: https://github.com/aaaastark/Web_Scraping.git

PROJECTS (PERSONAL WORK)

DATA VISUALIZATION (PYTHON) **AUGUST,23,2021**

Netflix Data Visualization:

- Netflix's strategy is focused on data analysis. The goal is to improve data visualization tools to provide relevant information, in real time, on the state of the environment. This is intended for all departments and businesses. Equipping the entire company enables all stakeholders to be assisted in their decision-making or creative process.

Python Libraries and Dataset:

- Sklearn, Pandas, , Seaborn, Plotly, Matplotlib, Numpy. Netflix Titles (.csv)

GitHub Link: https://github.com/aaaastark/Netflix_Data_Visualization.git

DATA ANALYSIS (PYTHON) **AUGUST,22,2021**

World Happiness Report:

- The World Happiness Report is a landmark survey of the state of global happiness. The report continues to gain global recognition as governments, organizations and civil society increasingly use happiness indicators to inform their policy-making decisions. Leading experts across fields – economics, psychology, survey analysis, national statistics, health, public policy and more – describe how measurements of well-being can be used effectively to assess the progress of nations. The reports review the state of happiness in the world today and show how the new science of happiness explains personal and national variations in happiness.

Python Libraries and Dataset:

- Pandas, Seaborn, Matplotlib, Numpy. World Happiness Report/World Happiness Report 2021 (.csv)

GitHub Link: https://github.com/aaaastark/World_Happiness_Report.git

DATA ANALYSIS (PYTHON) **AUGUST,21,2021**

Framingham Heart Study-Cohort (FHS-Cohort):

- The Framingham Heart Study (FHS) has conducted seminal research defining cardiovascular disease (CVD) risk factors and fundamentally shaping public health guidelines for CVD prevention over the past five decades.
- This dataset comprises of predictors such as cholesterol, age, diabetes, and family history that are used to predict the onset of heart disease in a patient.

Python Libraries and Dataset:

- Pandas, Seaborn, Matplotlib, Numpy. Framingham (.csv)

GitHub Link: https://github.com/aaaastark/Framingham_Hart_Study_Cohort.git

SECURITY SYSTEM (C++) **DEC,25,2020**

Top Password Security System:

- The project base in three different Algorithm base. 1: Cryptography 2: Caesar Cipher 3: Vigenere Cipher. The OOP(C++) language use in this project building.
- When user enter a password in the type of character. Then these algorithm are process of Ciphertext into Plaintext or Plaintext into Ciphertext

C++ Libraries and Algorithm:

- Iostream, Fstream, Cstream, String, Cstring, Cmath, Stdlib.h, Conio.h
- Caesar Cipher, Cryptography, Vigenère cipher

Explanation Link: https://mega.nz/file/wZIXyapZ#lZ_8g-f6oWgFYoPum1A5eye02rjb2bfxVaec7Bdiun4

GitHub Link: https://github.com/aaaastark/Top-Password-Secruity-System.git