# RUMMAN AHMAD

New Delhi, India | +917982364612 | rummanahmad05@gmail.com | LinkedIn | GitHub | Kaggle

## EDUCATION

**Jamia Millia Islamia**- Bachelors of Technology in Computer Engineering **New Delhi,India**
**CGPA – 8.14** 2021 – Present

## WORK EXPERIENCE

**Goalwit Technologies** **New Delhi, India**
*Machine Learning Engineer* *June-2022 - Present*

- As an experienced **Machine Learning Engineer**, I specialize in researching, building, and designing self-running AI systems to automate predictive models.
- Notably, I created an accurate model using **UnderSampling Technique** and **ML algorithms**, which predicts potential profiles that are likely to purchase **Premium Plans**.
- Designed a **Ranking System** in Python that allows management to target potential profiles efficiently..
- The ranking system uses various features to rank potential profiles.
- Successfully deployed the model on **Azure**.

**JMI Research Intern** **New Delhi, India**
*Department of Computer Engineering Jamia Millia Islamia – Dr. Musheer Ahmad* *October-2022 - March-2023*

**Implemented a Skip-Connected 2D-CNN Model for Accurate Follicle Detection in Medical Ultrasound Imagery of PCOS.**

- Designed and implemented a sophisticated **2D-CNN** model to detect follicles in **Medical Ultrasound Imagery**.
- Implemented **Skip Connections** in the 2D-CNN model to improve training efficiency and accuracy.
- Demonstrated a high level of proficiency in machine learning by achieving an accuracy of **99%** on ultrasound (USG) images.

**Performance Evaluation and Comparison.**

- Conducted extensive investigations into the **Metabolic Disorder PCOS** and its detection in women without infertility.
- Developed a predictive model that leveraged the combined power of **LSTM** and **1D-CNN** architectures to achieve optimal accuracy.
- Performance was evaluated using metrics such as **loss**, accuracy, **ROC-AUC curve**, and **confusion matrix**.

## SKILLS

- **Programming:** Python, C++, C, Data Structure And Algorithms, Object Oriented Programming
- **Data Science Skills:** Data Analysis, Mathematics and Statistics,Machine Learning, Deep Learning, Transfer Learning, EDA, CNN, RNN, LSTM, OpenCV, Natural Language Processing, Computer vision
- **Libraries**: Pandas, NumPy, Scikit-Learn, Seaborn, Matplotlib, TensorFlow, Keras, Pytorch, NLTK,
- **Web Development**: HTML, CSS, JavaScript, ReactJs , Flask, API, NextJs, Bootstrap.
- **Tools**: Linux, Git, Google Colab, POSTMAN, MySQL , FileZilla, Digital Ocean, Azure
- **Databases:** SQL , Mongo DB

## PROJECTS

**Implemented a Deep learning model using InceptionV3 architecture to classify** **Python, TensorFlow, Keras,Flask**

- Developed a deep learning model for dog breed classification by leveraging the **InceptionV3,** architecture.
- Utilized the InceptionV3 model with pre-trained **weights** from the **ImageNet** dataset.
- Implemented a **feature extraction** function that utilized the InceptionV3 model to extract high-level features from input images..
- Performed **GlobalAveragePooling** to obtain a compact representation of the extracted features.
- **GitHub**

**Facial Recognition-Based Music Recommendation System** **Python, TensorFlow, Keras,React,Flask**

- Developed a facial expression recognition system using **Artificial Intelligence (AI)** that recommends songs based on detected emotions.
- The model was trained using self-collected facial reaction data and achieved an accuracy of **90%** using a **Neural Network** approach.
- Upon detecting facial expressions, the system directs users to **Spotify** to access recommended songs.
- The project demonstrates proficiency in both **Computer Vision** and **Machine Learning Techniques**.
- **GitHub**

**Movie Recommendation System** **Python, Pandas, Numpy,Matplotlib**

- Developed a movie recommendation system using **Collaborative Filtering**.
- It predicts user preferences based on the behavior of **similar users**.
- Data visualization techniques were employed using **Matplotlib** and **Seaborn** to gain insights into the data
- A **Pivot Table** was utilized to recommend movies based on user preferences and improve the model .
- **GitHub**

**WINEQUALITY PREDICTION** **Pandas, Numpy, Matplotlib, Scikit Learn, Python**

- Developed a predictive model for wine quality **using DecisionTreeClassifier**,
- Feature selection was performed using **Principal Component Analysis (PCA),** which reduces the dimensionality of the data.
- Clustering was utilized using **KMeans** and **DBSCAN** algorithms, with **pruning** of the dataset accomplished by selecting the least **ccp_alpha** parameter.
- The data was **standardized** to ensure that the model could effectively learn from the features, resulting in a predictive score of **57%**
- **GitHub**

## ACHIEVEMENTS

- **Achieved RANK 5th in hackathon organised by DTU**
- **CodeChef Starters 25 Division 3 (Rated) Global Rank: 759)**
- Secured **3rd** position in **HackInit** hackathon organized by **JMI**