

**Mahaz Abbasi**

## DATA SCIENTIST / ML ENGINEER / PYTHON DEVELOPER

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Date of birth  
09/21/1995

### SOCIAL NETWORKS

Coursera

LinkedIn

GitHub

### SKILLS

#### Artificial Intelligence

AI for Every One  
ML (machine learning algorithms)  
Deep Learning(CNN, ANN, RNN)  
NLP (Deep Learning)  
Image processing (Deep Learning)  
AWS SageMaker ( train, build, deploy)  
OpenCV  
Statistical Thinking in Python

#### Python Development

Flask (API)  
Web Scraping (Data Scraping using Python)  
Automation (using Python)  
Plugin (PyQt5 Python)

#### Web Development

HTML  
CSS  
Tailwind  
NextJs  
JavaScript  
TypeScript

#### Database

SQL  
ETL (Data Pipeline)  
PostGres

#### Web Designing

Adobe Illustrator  
Figma

### EDUCATION

#### BS Bioinformatics

From September 2017 to January 2021 Comsats Institute of Information and Technology Islamabad

#### MS Artificial Intelligence and Computing

From March 2021 to February 2023 PIAIC Islamabad

#### Certified AI, Metaverse, and Web 3.0 Developer & Solopreneur

Since August 2022 PIAIC Air University

### WORK EXPERIENCE

#### Senior Data Scientist

Since June 2022 Khushhali Micro Finance Bank Limited(KMBL) Islamabad, Pakistan  
Developed a credit risk model with a probability-based approach to determine each customer's credit score. To increase the effectiveness of loan management, this model is being used in 280 branches of the bank.

Designed an ETL by extracting dataset from T24 server to dump into local DataMart.

Handled audit reports of each branch to extract the desire data from the reports which converts junk data into useable data.

Completed several automation tasks, such as, encryption of user's ATM information etc.

Using PyQt5 (Python), developed a desktop application that collects user data from provided files and saves it to a local location.

#### Machine learning Engineer / Python Developer

From February 2021 to June 2022 TPL Tracker Islamabad

Designed a Building Digitization of Aerial images using deep learning technique Convolutional Neural Network (CNN) and Transfer Learning (pre-trained models). The company was able to save time by using this model to automate the manual digitization of satellite photos that was previously done by digitizers.

Developed and deployed Address Parsing Model using Natural Language Processing (NLP) and Transfer Learning to extract address' information by chunking it into different portions like street, city, or country to acquire specific data from user's address.

Created and deployed API on AWS using python Flask that shows panoramic view of satellite image to manages traffic by recommending the shortest route.

Build a plug-in that outputs the longitude and latitude of any point on an aerial image.

By using gmaps and openCV extracted real-time traffic conditions for route planning.

#### Roku Developer

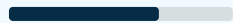
From August 2020 to January 2021 NextIn Islamabad

Designed screensavers applications for Roku Television device by using BrightScript and SceneGraph.

Created gaming applications for Roku Television device.

## LANGUAGES

English



Urdu



## INTERESTS

Sports (Soccer)

Traveling

## WORK EXPERIENCE

### Freelancing

Since July 2019 UpWork, and Fiver Online

Developed Traffic Signal Automation using Transfer Learning, Convolutional Neural Network (CNN), and openCV. This model was deployed widespread in the Canadian states. With the use of this model, heavy traffic can be controlled without the use of traffic wardens.

Designed Face Mask Detection System by utilizing AWS Sagemaker for model development as well as for data labelling and training.

Created ChatBot using Deep Learning's CNN and deployed it on client's website. To be able to respond to any random inquiry, a large dataset was used to train the model.

Devised a Student Management System employing Tkinter connected to a database to store and manage each student's record. The database may be updated wistfully using the Delete, Update, and Change option available in the application.

By utilizing Selenium, BeautifulSoup, and Request to automate the Shopify account, to update the product data with the aid of information that has been scraped from other product websites.

Build a portfolio website by utilizing NextJs, and Tailwind. Design of the website was created with the help of Sigma.

## RESEARCH AND PUBLICATIONS

### Classification of Aurora Kinase A (AURKA) Inhibitors using Multiple Machine Learning Methods.

Aurora kinase A (AURKA) is involved in cell mitosis and regulates many processes during cell division as well as a number of key oncogenic signaling pathways. A dataset of 2548 AURKA inhibitors was collected from BindingDB database whose descriptors were generated using PaDEL Descriptor software.

Dataset of Aurora A kinase inhibitors was utilized to build classification models. To classify active and inactive Aurora-A kinase inhibitors by using K-nearest neighbor (KNN) algorithm and Adaptive Boosting (AdaBoost) Algorithm. Test dataset was utilized to check the prediction accuracies of these models. The prediction accuracy of Adaboost models for the Training Dataset was 100% and KNN accuracy was 93%. Test Dataset accuracy was 99% for Adaboost and 90% for KNN.

Adaboost and KNN both models developed in this research can be utilized for further classification of known datasets if Aurora A kinase inhibitors and identification of unknown AURKA inhibitors. These compounds can be used as potential drugs candidates for cancer caused by malfunctioning of Aurora Kinase A.

## CERTIFICATIONS

### Artificial Intelligence for Everyone

March 2020 Coursera Online

### Introduction to Programing using Python

From July 2019 to December 2019 Microsoft Technology Associate (MTA) Online

### Statistical Thinking in Python

From January 2020 to April 2020 Coursera Online

### Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning

From September 2022 to December 2022 Coursera Online

### DeepLearning.AI TensorFlow Developer

From February 2023 to August 2023 Coursera Online

### Natural Language Processing in TensorFlow

From January 2023 to April 2023 Coursera Online

### Convolutional Neural Networks in TensorFlow

From February 2021 to July 2021 Coursera Online

### Sequences, Time Series and Prediction

From January 2023 to July 2023 Coursera Online

### Data Science Methodology

From August 2023 to September 2023 IBM-Coursera Online

### Python for Data Science and AI

August 2023 IBM Online

### Python for Data Science, AI & Development

From July 2023 to August 2023 IBM Online