Khawaja Abaid Ullah

Machine Learner

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Computer Science graduate specializing in data science and machine learning (through self-learning). I love building niche and fun projects with the focus on creating value for others, and for self-learning. In the long run, I aspire to work on the democratization of artificial intelligence.

SKILLS

- **Programming:** Python, JavaScript, C++, C#
- **Data Wrangling:** Pandas, Numpy, Scipy, Statsmodels, NetworkX
- **Visualization:** Matoplotlib, Seaborn
- **Machine Learning:** Scikit-Learn, XGBoost, CatBoost, LightGBM, Keras/Tensorflow
- **NLP:** AllenNLP, NLTK, Spacy, Hugging Face
- **Database:** SQL
- **Cloud:** AWS EC2, AWS SageMaker, Google Colab, Kaggle Notebooks
- **Web Scraping:** Requests, Beautiful Soup, Selenium, Scrapy
- **Others:** Django, PyQt5, Git, OpenCV, Photoshop, MS Office

EDUCATION

University of Narowal

Bachelor of Science in Computer Science (GPA: **3.69**/4.0) 2017-2021

Punjab Group of Colleges, Pasrur

FSc. Pre-Engineering (**81.72**% Marks) 2015-2017

Educational Testing Service

Test of English as a Foreign Language (TOEFL): **110**/120 Marks Sep, 2021

Educational Testing Service

GRE General Test: (**318**/340) Marks April, 2022

CERTIFICATES

Harvard University's CS 50

CS50x 2022 Intro to Computer Science (*Official Certificate Link*)

EXPERIENCE

Open-Source Developer / Self Employed Mar 2021 – Present

- **Prewordict:** An NLP based nerdy game. (*https://khawajaabaid.github.io/prewordict/*)
- **TweetsCloudBot:** A twitter bot that generates word clouds of tweets. (*Bot Twitter Link*)
- **eBookEZ:** A desktop application that finds meanings and synonyms of English words. (*Github*)

Freelance Software Developer / Fiverr Oct 2021 - Present

Web Scraping, Automation, GUI-based desktop apps development.

Projects and more on next page!

PROJECTS

Crowd Detection and Behavior Analysis / Final Year Project, BS-CS

- Worked on Computer Vision to train Deep Learning models for Person Detection as well as Detection of Certain (similarly attired) Groups among crowd.
- Developed custom algorithms for Chaos Detection and Crowd Detection

USED: TensorFlow Object Detection API, OpenCV, Matplotlib, PyQt5, Google Colab

Gamer Assistant / Addresses the unaddressed needs of gamers

- A website based on Django and consisting of three main components as highlighted below.
- ***FPS Predictor v2:*** Predicts the expected FPS for a user specified PC for a specified game
  - *Scraped and curated FPS and games data from sites like Steam & Techpowerup.*
  - *Used XGBoost to build the FPS Predictor*
- ***Games Recommender:*** Recommends games based on user's specified PC
- ***PC Recommender:*** Recommends PC components based on user's favorite games

USED: Django, XGBoost, Pandas, Scikit-Learn, Beautiful Soup, Requests

Video Games FPS Predictor v1

- Scraped games info and their FPS data from the internet (Steam and other sites)
- Used Random Forest algorithm to build the FPS predictor

USED: Scikit-Learn, Pandas, Requests, Beautiful Soup

Prewordict / A fun little nerdy game (Inspired by Wordle)

- Processed 180,000 medium articles and clustered the similar words
- Generated word clouds from these clusters. Given a word cloud, user has to predict one word that best belongs in the word cloud.

USED: Scikit-Learn (TFIDF, SVD, KMeans), WordCloud, Numpy, Pandas, Matplotlib, Kaggle

HONORS, AWARDS & KAGGLE COMPETITIONS

- **Topper Computer Science Class of 2021** / University of Narowal — July 2021
- **3rd Place Heart Disease Prediction Competition** / Kaggle — June 2022
- **Placed 50th** /665: **Tabular Playground S03 E03 - Jan 2023** / Kaggle — Jan 2023
- **Placed 206th** /693: **Tabular Playground S03 E01 - Jan 2023** / Kaggle — Jan 2023
- **Placed 284th** /770: **Tabular Playground S03 E02 - Jan 2023** / Kaggle — Jan 2023

ACTIVITIES

I'm always in the pursuit of learning. I participate in Kaggle Competitions. I love books, coding, gaming, F1 and jogging.