

Khawaja Abaid Ullah

Creator **Teras** | Machine Learner | Kaggle Expert



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in KhawajaAbaid



khawajaabaid.github.io

Computer Science graduate specializing in data science and machine learning (through self-learning). I've created Teras, which is a Keras-based unified deep learning library for tabular data.

I also blog about Machine Learning on medium. [Check them out!](#)

SKILLS

- **Programming:** Python, JavaScript, C++, C#
- **Data Wrangling:** Pandas, Numpy, Scipy, Statsmodels, NetworkX
- **Visualization:** Matplotlib, Seaborn
- **Machine Learning:** Keras/Tensorflow, PyTorch, Scikit-Learn, XGBoost, CatBoost, LightGBM
- **NLP:** AllenNLP, NLTK, Spacy, Hugging Face
- **Database:** SQL, MongoDB
- **Cloud:** AWS EC2
- **Web Scraping:** Requests, BeautifulSoup, 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

CERTIFICATES

Harvard University's CS 50

CS50x 2022 Intro to Computer Science ([Official Certificate Link](#))

Educational Testing Service

Test of English as a Foreign Language (TOEFL): 110/120 Marks

Sep, 2021

EXPERIENCE

Open-Source Developer / Self Employed

May 2022 – Present

- **Teras:** A Unified Deep Learning Library for Tabular Data ([Github](#))
- **Prewardict:** 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](#))

Junior Python Developer (Remote) / Comundo, Denmark

Feb 2023 – May 2023

- Developing semi-supervised, robust web scrapers for data curation
- Aggregating the scraped data to store in database

Personal Goal Pursuit / Career Break

Aug 2021 – Apr 2022

- Applied for Stanford's Knight-Hennessy Scholarship and the Fulbright's scholarship
- Self-learned Machine Learning skills

PROJECTS

Teras – A Unified Deep Learning Library for Tabular Data / Open-Source Project

- Provide state-of-the-art deep learning architectures for tabular data proposed by researchers under a uniform API.
- Implement classification, regression, data generation, imputation architectures and much more!

USED: Keras, TensorFlow, TensorFlow-Probability, Scikit-Learn

Repo: <https://github.com/KhawajaAbaid/teras>

Prewardict / 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

Play it here: <https://khawajaabaid.github.io/prewordict/>

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

HONORS, AWARDS

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| • Topper Computer Science Class of 2021 / University of Narowal | July 2021 |
| • Kaggle Expert / Kaggle | Feb 2023 |

TWITTER ACHIEVEMENTS

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| • Replied by Yann LeCun | June 2023 |
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ACTIVITIES

I'm always in the pursuit of learning. I participate in Kaggle Competitions and blog about Machine Learning on medium. I love books, coding, gaming, F1 and jogging.