

Abdul Basit

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Machine Learning Engineer

EXPERIENCE

LAHORE UNIVERSITY OF MANAGEMENT AND SCIENCES (LUMS) | MACHINE LEARNING ENGINEER

Jan 2023 - Present

- Working as a machine learning engineer at the Center for Speech and Language Technologies (C-SaLT) lab, Lahore University of Management Sciences (LUMS).
- Primarily focus on Natural language processing problems, especially on Low-resource languages.
- I created an application that utilizes embedding for Urdu language synonyms.
- Reduce the time by 300 percent for Urdu language Synonyms
- Fine Tune Alpaca Model for low resource language.
- Fine Tune LLaMa Model for a specific task.
- Create a project that enables interactive communication with PDF documents, extracting answers directly from the source content through LLMS.
- Develop a pipeline on the Hugging Face platform to perform zero-shot modeling with Roberta and BERT.
- Develop a pipeline to Fine-tune data set using the hugging face platform for Roberta and Bert Models
- Utilize the Open AI API to conduct zero-shot modeling.
- Performed literature review to identify research gaps and opportunities in a specific domain, resulting in a report with recommendations for future research

FREELANCE | MACHINE LEARNING ENGINEER - SELF EMPLOYED

Oct 2020 - December 2022

- Earned 10 Silver Medals at Kaggle.
- Developed a simple CNN model for cat and dog classification.
- Deployed ResNet50 for brain tumor classification and use the technique of Transfer learning.
- Deployed Efficient Net for pistachio classification and use the technique of Fine Tuning.
- Develop Resnet50 from Scratch for multi-image classification problem.
- Deployed GAN on MNIST data set to generate images.
- Deployed RNN, LSTM to predict the stock market price.
- Build a text classifier model for emotion detection in text.
- Wrote many deep learning tutorials at **Medium**.
- Made **YouTube** videos on which every aspect of the research paper was discussed.

KAIZEN TECH STUDIO | UNITY DEVELOPER

Nov 2017 - May 2018 | Lahore, lhr

- My task was to develop games using the unity engine on the mobile platform.
- developed games of different categories like Arcade Simulation, and FPS and do research for user engagement to the game.

CERTIFICATIONS

DEEP LEARNING SPECIALIZATION | DEEPLARNING.AI

Aug 2019

- Neural Networks and Deep Learning
- Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization
- Structuring Machine Learning Projects

EDUCATION

UNIVERSITY OF HERTFORDSHIRE | MSc IN ARTIFICIAL INTELLIGENCE AND ROBOTICS

Sep 2018-Nov 2020 | Hatfield , United Kingdom

Courses:

- Theory and Practice of Artificial
- Neural Networks and Machine Learning
- Artificial Life with Robotics
- Advanced Research Topics in Computer Science

Projects:

- Thermal Face Identification: Developed an Encoder Decoder-based algorithm to generate Thermal Images of human faces and used them to classify 41 unique subjects. A specific sequence of custom filters was developed to increase face identification accuracy.

UNIVERSITY OF MANAGEMENT AND TECHNOLOGY | BS IN SOFTWARE ENGINEERING

Feb 2012 - Jun 2017 | Johar Town, Lahore

Courses:

- Operating Systems
- Artificial Intelligence
- Digital Image Processing
- Information Retrieval
- Computer Graphics

Projects:

- Final Year Project: A mobile and web-based online application to hire chefs nearby, you can see their portfolio, rate their services, comment on your views, buy secret recipes and fetch live locations when chefs are hired. It is a good platform for chefs to work online and off hours and its also helpful for those who learn recipes in their free time.

SKILLS

- Good understanding of various machine learning algorithms and techniques, such as supervised and unsupervised learning, deep learning, and reinforcement learning.
- Understanding of mathematical and statistical aspect of Machine learning algorithms.
- Analyzing the large data sets, Data processing and data cleaning.
- Have Problem solving skills able to identify and analyze complex problems, and design and implement effective solutions using machine learning techniques.
- Have Communication skills able to effectively communicate own ideas and findings to both technical and non-technical audiences, through written reports, presentations, and other forms of communication like writing articles at medium and making videos at YouTube.

PROGRAMMING

Languages:

Python • C • Bash • SQL • C

Frameworks :

Linux Tool • TensorFlow, • PyTorch

• langchain, • llamaindex Familiar :

Azure • Google Colab,

LINKS

- Portfolio - (<https://106abdulbasit.github.io/Portfolio/>)
- Linked In - (<https://www.linkedin.com/in/abdul-basit-201849b4/>)
- GitHubRepo - (<https://github.com/106AbdulBasit>)
- Medium - (https://medium.com/@AB_Niazi)
- Kaggle - (<https://www.kaggle.com/abdulbasitniazi/code>)
- Youtube - (<https://www.youtube.com/channel/UCSAw-QDHdXjrAMpg7-TELVA>)