



Huma Nisar

Date of birth: 18/07/1994 | **Nationality:** Pakistani | **Phone:** (+92) 3366915200 (Mobile) | **Email:** humajamil200@gmail.com |

Address: Chubaray Wali PO 85,87 Sahiwal Punjab Pakistan, 57000, Sahiwal, Pakistan (Home)

ABOUT MYSELF

Passionate machine learning researcher with 6+ years of experience in predictive modeling and data mining. Excited to implement statistical machine-learning solutions for Macro Globe. Seeking admission to a dynamic and progressive institute for PhD program to expand my knowledge and research experience in Machine Learning.

WORK EXPERIENCE

06/10/2023 – CURRENT Sahiwal, Pakistan

UNIVERSITY LECTURER IN COMPUTER SCIENCE GOVERNMENT COLLEGE UNIVERSITY FAISALABAD SAHIWAL CAMPUS

My Job Responsibilities included:

1. Deliver the lectures (Courses Delivered: Artificial Intelligence, Operating System, Programming Fundamentals, Software Engineering)
2. Prepare a course file that includes the Course Outline, Attendance of Students, Scores and Solutions of All Exams.
3. Uploading the results and maintaining the record on the Faculty Portal

08/05/2021 – 06/07/2023 Sahiwal, Pakistan

COMPUTER SCIENCE LECTURER SAHIWAL COLLEGE OF THE EDUCATORS

My Job Responsibilities included:

1. Deliver the lectures (Courses Delivered: Artificial Intelligence, Operating System, Programming Fundamentals, Digital Logic Design, Software Requirement Engineering)

EDUCATION AND TRAINING

12/09/2016 – 09/08/2018 Rawalpindi, Pakistan

MS CS MASTER OF COMPUTER SCIENCE (18 YEARS EDUCATION) PMAS Arid Agriculture University Rawalpindi Pakistan

Website <https://www.uar.edu.pk/index.php> | **Field of study** Software Engineering | **Final grade** 3.81/4.00 |

Level in EQF EQF level 1 | **Thesis** Online Object Recognition Using Deep Learning Machine

14/09/2013 – 11/05/2015 Rawalpindi, Pakistan

MCS MASTER OF COMPUTER SCIENCE (16 YEARS EDUCATION) Fatima Jinnah Women University Rawalpindi Pakistan

Website <https://fjwu.edu.pk/> | **Field of study** Software Engineering | **Final grade** A |

Thesis Handwritten Signature detection in urdu language using BERT

LANGUAGE SKILLS

Mother tongue(s): **URDU**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	B1	C2	C2	B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

DIGITAL SKILLS

Python (PyROOT, RDataFrame; ML: Keras, TensorFlow) | Machine Learning R Programming | MATLAB | C | C++ | Programming Languages | Office

PUBLICATIONS

2020

[SBAG: A Hybrid Deep Learning Model for Large Scale Traffic Speed Prediction](#)

Intelligent Transportation System (ITS) is the fundamental requirement to an intelligent transport system. The proposed hybrid model Stacked Bidirectional LSTM and Attention-based GRU (SBAG) is used for predicting the large scale traffic speed. To capture bidirectional temporal dependencies and spatial features, BDLSTM and attention-based GRU are exploited. It is the first time in traffic speed prediction that bidirectional LSTM and attention-based GRU are exploited as a building block of network architecture to measure the backward dependencies of a network. We have also examined the behaviour of the attention layer in our proposed model. We compared the proposed model with state-of-the-art models e.g. Fully Convolutional Network, Gated Recurrent Unit, Long -short term Memory, Bidirectional Long-short term Memory and achieved superior performance in large scale traffic speed prediction..

Adnan, R.Mehak, K.Huma, J.M, Nabeel. " (IJACSA) , Vol. 11, No.1, 2020

CONFERENCES & SEMINARS

07/03/2020 – 09/03/2020 Faisalabad

Participant of IEEE Conferences

27/09/2024 – 27/09/2024 HEC Pakistan

Author Workshop: How to find high impact journals to read & publish

03/10/2024 – 03/10/2024 Emerald Publishing

Students Ambassador orientation and Training HEC

19/08/2024 – 19/08/2024 IEEE for Asia

Incorporating IEEE Xplore resources into your teaching: A dedicated session for lecturers

01/10/2024 – 01/10/2024 Bangalore in Association with IEEE Bangalore Section

"Dielectric Resonator Antenna: A Potential Radiator for 5G/6G MIMO Antenna Technology."

27/09/2024 – 29/10/2024 New York

10th International Youth Conference (IYC10), Informal Youth Summit of the Future.

Link <https://iycforyouth.org/certificates/iyc-10/attendance.php/generatecertificate?name=Huma+Nisar+Nisar>

18/09/2024 – 18/09/2024 HEC Pakistan

Unlocking the Power of Scopus Webinar 4: Introducing Scopus AI for Researchers

26/09/2024 – 26/09/2024 PECB Beyond Recognition Held Online

Integrating ISO/IEC 27035 and ISO/IEC 42001: A Holistic Approach to AI Governance

04/12/2024 – 04/12/2024 Comsats Institute of Information Technology Islamabad

2nd International Conference on modern trends in applied linguistics Navigating Linguistic Intricacies: A Novel Framework for Urdu Sentiment Analysis using GAT and BERT

This paper presents a novel aspect-based sentiment analysis methodology designed specifically for Urdu news headlines in order to address the challenges posed by the complex morphology of Urdu and the lack of NLP resources.

Given the lack of annotated datasets for Urdu sentiment analysis, the work offers the first hand-annotated dataset of its kind, which has been meticulously produced to capture the grammatical nuances of Urdu. This dataset serves as the foundation for a state-of-the-art model that combines the power of multilingual BERT with Graph Attention Networks (GAT) by utilizing the contextual embeddings of BERT and the relational learning capabilities of GAT. The framework undergoes rigorous preprocessing to enhance the model's understanding of Urdu's language patterns, including tokenization, POS tagging includes the Stanza NLP toolbox for lemmatization. The results of the evaluation demonstrate that the proposed algorithm outperforms baseline techniques in sentiment categorization accuracy, achieving significant increases. In addition to improving NLP resources for low-resource languages like Urdu, this study provides valuable information for linguists, media analysts, and NLP practitioners working with these languages. By clearing the way for a richer understanding and additional processing of linguistic data in historically marginalized languages, the work promotes the development of multilingual NLP applications and offers up new possibilities in computational linguistics.

Link https://drive.google.com/file/d/1ZXwE7rbQcGCWwLeXTDBq_-4X8dYfAAjs/view?usp=drive_link

19/12/2024 – 19/12/2024 National University of Sciences and Technology Islamabad

1st International Conference on Sustainable Development Goals: Multimodal Analysis of Beauty and Diversity on Instagram: A Deep Learning Approach

This research examines the way beauty and diversity are presented on Instagram with a more technologically potent view of robustly being based on methods that are computationally intensive. High precision advanced image-processing models on CLIP, ViT, Swin Transformer, ResNet, SEER are used to discern, through a quantitative appraisal of visual content, what form of beauty standards have managed to be communicated; also, text-based information culled with the use of the BERT model forms a complement to that very visual analysis of a great play between visuals and the narratives. Then, it moves on to multimodal classification, in which it shows the effectiveness of the LLaVA model to consider visual and textual data and thus make the complex classification task feasible at a high accuracy level. This shows that prompt engineering is a very important factor for the refinement of the model output, and through this, the importance of prompt engineering in multimodal analysis comes to the forefront. Therefore, the Late Fusion approach which combines ViT and BERT sums up to providing a holistic framework that will assist in enriching one's knowledge about beauty and diversity in social media narratives. The systematic approach underscores how integrating various modalities into a system will help tackle the complexities of social media content. Key contributions include the novel application of state-of-the-art deep learning models as well as the development of a multimodal analytic framework that collectively enhance the understanding of subjective constructs in the social media beauty discourse. However, inherent challenges, such as subjective classification and dataset limitations, demand avenues for further work, such as better-quality dataset creation and novel forms of prompting to advance the developing field.

06/01/2025 – 06/02/2025 Deeplearning.ai

Generative AI with Large Language Models

Implementation through prompt based engineering

Link <https://coursera.org/verify/YH5XIOZ00RVG>

● **HOBBIES AND INTERESTS**

Research, Reading

● **COMMUNICATION AND INTERPERSONAL SKILLS**

Communication Skills

1. Technical communication skills acquired through professional and research experience
2. Verbal communication skills developed through presentations and extra co-curricular activities