

Naima Iltaf

Professor
Military College of Signals
Email: naima@mcs.edu.pk
Contact: 92-51-92
LinkedIn:



About

Dr. Naima Iltaf is working as Professor in the Military College of Signals. Dr. Naima Iltaf has a PhD in Recommender System/Distributed System. Dr. Naima Iltaf has published 50 research articles & conference papers having a citation count of 462, carried out 12 projects and filed 0 intellectual property.

Qualifications

PhD in Recommender System/Distributed System NUST, Islamabad , Pakistan	2008 - 2013
MS in Software Engineering NUST, Islamabad , Pakistan	2004 - 2006
MSc in Computer Science Jinnah University for Women , Pakistan	2000 - 2003
F.Sc in Pre Medical BSE, Karachi , pakistan (Duplicate)	1996 - 1998

Experience

Professor Military College of Signals	2024- Present
Associate Professor Military College of Signals	2020 - 2024
Associate Professor Military College of Signals	2019 - 2020
Assistant Professor Military College of Signals	2013 - 2019

Awards

Best Researcher MCS 2019	2020
Best Teacher MCS 2018	2019
Gold Medal Recipient of Gold medal in Masters in Computer Science.	

Research Projects

National Projects

AudioX	2025
Funding Agency: IGNITE	
Amount: PKR 77,604.00	
Status: Completed	
Data Dialogue	2025
Funding Agency: IGNITE	
Amount: PKR 75,756.00	
Status: Completed	
Improving Bilingual Data Quality in Citizen Records & Semantic Information Retrieval	2025
Funding Agency: NADRA	
Amount: PKR 6,980,000.00	
Status: Approved_inprocess	
Smart Visual Alert System	2023
Funding Agency: IGNITE	
Amount: PKR 0.06	
Status: Completed	
AI-based Risk Predictive tool for early diagnosis and treatment of Gestational Diabetes	2023
Funding Agency: PHC GLOBAL	
Amount: PKR 12,944,923.00	
Status: Approved_inprocess	
Domain Specific GPT (Large Language Model)	2023
Funding Agency: Army	
Amount: PKR 1,720,000.00	
Status: Approved_inprocess	
Road accident avoiding system	2022
Funding Agency: Ignite	
Amount: PKR 59,500.00	
Status: Completed	
AI STP- Web Appl Security Evaluation and Health Informatics	2022
Funding Agency: Army	
Amount: PKR 15,060,000.00	
Status: Approved_inprocess	
Surgeon X	2018
Funding Agency: IGNITE	
Amount: PKR 29,000.00	
Status: Completed	
Indoor Disaster Analyzer	2018
Funding Agency: IGNITE	
Amount: PKR 64,500.00	
Status: Completed	
Virtual Visits	2019
Funding Agency: IGNITE	
Amount: PKR 15,500.00	
Status: Completed	
VioDet	2020
Funding Agency: IGNITE	
Amount: PKR 68,215.00	
Status: Completed	

International Projects

Research Articles

ConvSeq-MF: Convo-Sequential Matrix Factorization for recommender system	2025
--	------

<i>Zeeshan Khan Zafran Khan Naima Iltaf</i> <i>Neurocomputing</i> , Volume 618, Article Number 128932 Impact Factor: 5.500 Quartile: 1 Citations: 2 DOI: https://doi.org/10.1016/j.neucom.2024.128932		
Efficient Text Style Transfer through Robust Masked Language Model and Iterative Inference <i>Osama Subhani Khan Naima Iltaf Usman Zia Rabia Latif Nor Shahida Mohd Jamail</i> <i>IEEE Access</i> , Volume 12, Pages 182353-182373 Impact Factor: 3.400 Quartile: 2 Citations: 1 DOI: 10.1109/ACCESS.2024.3501320		2024
Dual Modality Reverse Reranking (DM-RR) Based Image Retrieval Framework <i>Ikhtlaq Ahmed Naima Iltaf Rabia Latif Nor Shahida Mohd Jamail Zafran Khan</i> <i>IEEE Open Journal of the Industrial Electronics Society</i>, Volume 5, Pages 886-897 Impact Factor: 5.200 Quartile: 1 DOI: 10.1109/CSDE59766.2023.10487686		2024
Learning beyond books: A hybrid model to learn real-world problems <i>Zeeshan Anwar Hammad Afzal Naima Iltaf</i> <i>Computer Applications in Engineering Education</i> , Pages 1-15 Impact Factor: 2.000 Quartile: 2 Citations: 1 DOI: https://doi.org/10.1002/cae.22792		2024
Low Resource Summarization using Pre-trained Language Models <i>Mubashir Munaf Hammad Afzal Khawir Mahmood Naima Iltaf</i> <i>ACM Transactions on Asian and Low-Resource Language Information Processing</i>, Pages:19 Impact Factor: 1.800 Quartile: 3 Citations: 6 DOI: https://doi.org/10.1145/3675780		2024
Fuzzy ensemble of fined tuned BERT models for domain-specific sentiment analysis of software engineering dataset <i>Zeeshan Anwar Hammad Afzal Naima Iltaf Seifedine Kadry Jungeun Kim</i> <i>PLoS ONE</i> , Volume 19(5), Article Number e0300279 Impact Factor: 2.900 Quartile: 1 Citations: 4 DOI: https://doi.org/10.1371/journal.pone.0300279		2024
RPf-GCNs: reciprocal perspective driven fused GCNs for rumor detection on social media <i>Zafran Khan Jeonghwan Gwak Naima Altaf Witold Pedrycz Moongu Jeon</i> <i>Journal of Big Data</i>, Vol:11, Article number: 12, Pages:14 Impact Factor: 8.1 Quartile: 1 Citations: 4 DOI: 10.1186/s40537-023-00866-6		2024
A novel hybrid CNN-LSTM approach for assessing StackOverflow post quality <i>Zeeshan Anwar Hammad Afzal Ali Ahsan Naima Altaf Ayesha Maqbool</i> <i>Journal of Intelligent Systems</i>, Pages 1-21 Impact Factor: 2.100 Quartile: 3 Citations: 9 DOI: https://doi.org/10.1515/jisys-2023-0057		2023
Detection and Classification of Temporal Changes for Citrus Canker Growth Rate using Deep Learning <i>Naureen Zainab Hammad Afzal Taher Al-Shehari Muna Al-Razgan Naima Altaf Muhammad Zakria Muhammad Javed Hyder Raheel Nawaz</i> <i>IEEE Access</i> , Volume 11, Pages 127637-127650 Impact Factor: 3.9 Quartile: 2 Citations: 6 DOI: https://doi.org/10.1109/ACCESS.2023.3331735		2023
Deep-view linguistic and inductive learning (DvLIL) based framework for Image Retrieval <i>Ikhtlaq Ahmed Naima Altaf Dr Usman Zia0 Zafran Khan</i> <i>Information Sciences</i> , Volume 649, Article Number: 119641 Impact Factor: 8.1 Quartile: 1 Citations: 4 DOI: 10.1016/j.ins.2023.119641		2023
CrossDomain Recommendation Based on MetaData Using Graph Convolution Networks <i>Naima Altaf Rabia Khan Rabia Latif Nor Shahida Mohd Jamail</i> <i>IEEE Access</i> , Volume: 11, Page(s): 90724 - 90738 Impact Factor: 3.9 Quartile: 2 Citations: 2 DOI: 10.1109/ACCESS.2023.3307015		2023

Detection of Offensive Language and ITS Severity for Low Resource Language <i>Ramsha Saeed Hammad Afzal Sadaf Abdul Rauf Naima Altaf</i> <i>ACM Transactions on Asian and Low-Resource Language Information Processing</i> , Volume: 22, Issue:06, Article Number: 156 Impact Factor: 2.0 Quartile: 4 Citations: 11 DOI: 10.1145/3580476	2023
S-RAP: relevance-aware QoS prediction in web-services and user contexts <i>Hafiz Syed Muhammad Muslim Saddam Rubab Malik Muhammad Khan Naima Altaf Ali Kashif Bashir Kashif Javed</i> <i>Knowledge and Information Systems</i> , Volume 64, Issue 7, Pages 1997-2022 Impact Factor: 2.531 Quartile: 3 Citations: 5 DOI: https://doi.org/10.1007/s10115-022-01699-0	2022
A framework to predict early news popularity using deep temporal propagation patterns <i>Ramsha Saeed Haider Abbas Sara Asif Saddam Rubab Malik Muhammad Khan Naima Altaf Shynar Mussiraliyeva</i> <i>Expert Systems with Applications</i> , Volume 195, Article Number 116496 Impact Factor: 6.954 Quartile: 1 Citations: 7 DOI: https://doi.org/10.1016/j.eswa.2021.116496	2022
Contextual recommender system for E-commerce applications <i>Naima Altaf Zafran Khan Muhammad Ishfaq Hussain Joonmo Kim Moongu Jeon</i> <i>Applied Soft Computing</i> , Volume 109, Article Number 107552 Impact Factor: 8.263 Quartile: 1 Citations: 26 DOI: https://doi.org/10.1016/j.asoc.2021.107552	2021
Shift-invariant discrete wavelet transform-based sparse fusion of medical images <i>Naima Altaf Abdul Ghafoor M. Munawwar Iqbal Ch M. Mohsin Riaz Nuwayrah Jawaid Saghir</i> <i>Signal, Image and Video Processing</i> , Pages 1-9 Impact Factor: 2.157 Quartile: 3 Citations: 2 DOI: https://doi.org/10.1007/s11760-021-01998-z	2021
Enhanced Metamorphic Techniques-A Case Study Against Havex Malware <i>Zainab Mumtaz Mehreen Afzal Mian Muhammad Waseem Iqbal Waqas Aman Naima Altaf</i> <i>IEEE Access</i> , Volume 9, Pages 112069-112080 Impact Factor: 3.476 Quartile: 2 Citations: 6 DOI: 10.1109/ACCESS.2021.3102073	2021
Pharmacovigilance with Transformers: A Framework to Detect Adverse Drug Reactions Using BERT Fine-Tuned with FARM <i>Sajid Hussain Hammad Afzal Ramsha Saeed Mir Yasir Umair Naima Altaf</i> <i>Computational and Mathematical Methods in Medicine</i> , Volume 2021, Article ID 5589829, 12 pages Impact Factor: 2.809 Quartile: 2 Citations: 23 DOI: https://doi.org/10.1155/2021/5589829	2021
Dynamic distributed trust management scheme for the Internet of Things <i>Naima Altaf Syed Wasif Abbas Hamdani Javed Iqbal Bangash Asfandiyar Khan Abdul Waheed Khan Yawar Abbas Bangash</i> <i>Turkish Journal of Electrical Engineering and Computer Sciences</i> , Volume 29, Pages 796-815 Impact Factor: 0.853 Quartile: 4 Citations: 7 DOI: 10.3906/elk-2003-5	2021
A multifocus image fusion using highlevel DWT components and guided filter <i>Naima Altaf M. Munawwar Iqbal Ch Mohsin Riaz Abdul Ghafoor Syed Sohaib Ali</i> <i>Multimedia Tools and Applications</i> , Vol:79, Pages:12817-12828 Impact Factor: 2.757 Quartile: 2 Citations: 22 DOI: 10.1007/s11042-020-08661-8	2020
DST-HRS: A topic driven hybrid recommender system based on deep semantics <i>Zafran Khan Naima Altaf Hammad Afzal Haider Abbas</i> <i>Computer Communications</i> , Volume 156, Pages 183-191 Impact Factor: 3.167 Quartile: 2 Citations: 23 DOI: doi.org/10.1016/j.comcom.2020.02.068	2020
Enriching Non-negative Matrix Factorization with Contextual Embeddings for Recommender Systems <i>Zafran Khan Naima Altaf Hammad Afzal Haider Abbas</i> <i>Neurocomputing</i> , Volume: 380, Pages: 246-258 Impact Factor: 5.719 Quartile: 1 Citations: 48	2020

DOI: 10.1016/j.neucom.2019.09.080	
Pulse rate extraction based on local-area motion magnification <i>Maemoona Kayani Muhammad Mohsin Riaz Abdul Ghafoor Naima Altaf</i> <i>Measurement</i> , Volume 152, Article Number 107290 Impact Factor: 3.927 Quartile: 1 Citations: 3 DOI: 10.1016/j.measurement.2019.107290	2020
Automated acute lymphoblastic leukaemia detection system using microscopic images <i>Komal Nain Sukhia Abdul Ghafoor Muhammad Mohsin Riaz Naima Altaf</i> <i>IET Image Processing</i> , Volume: 13, Issue: 13, Pages 2548-2553 Impact Factor: 1.995 Quartile: 3 Citations: 17 DOI: 10.1049/iet-ipr.2018.5471	2019
Weighted image fusion using cross bilateral filter and non-subsampled contourlet transform <i>M. Munawwar Iqbal Ch M. Mohsin Riaz Naima Altaf Abdul Ghafoor Attiq Ahmad</i> <i>Multidimensional Systems and Signal Processing</i> , Volume: 30, Pages:2199–2210 Impact Factor: 1.810 Quartile: 2 Citations: 13 DOI: 10.1007/s11045-019-00646-7	2019
Content-based histopathological image retrieval using multi-scale and multi channel decoder based LTP <i>Komal Nain Sukhia Abdul Ghafoor Naima Altaf M.M. Riaz S.S. Ali</i> <i>Biomedical Signal Processing and Control</i> , Volume 54, Article Number 101582 Impact Factor: 3.137 Quartile: 2 Citations: 14 DOI: 10.1016/j.bspc.2019.101582	2019
Magnetic resonance and computed tomography image fusion using saliency map and cross bilateral filter <i>Naima Altaf M. Munawwar Iqbal M. Mohsin Riaz Muhammad Attique Sadiq Abdul Ghafoor</i> <i>Signal, Image and Video Processing</i> , Volume:13, Pages:1157-1164 Impact Factor: 1.794 Quartile: 3 Citations: 8 DOI: 10.1007/s11760-019-01459-8	2019
CATSWoTS: Context Aware Trustworthy Social Web of Things System <i>Sabeen Javaid Hammad Afzal Naima Altaf Haider Abbas Waseem Iqbal Fahim Arif</i> <i>Sensors</i> , Volume: 19, Issue: 14, Article Number: 3076, Impact Factor: 3.275 Quartile: 1 Citations: 15 DOI: 10.3390/s19143076	2019
HRS-CE: A Hybrid Framework to integrate Content Embeddings in Recommender Systems for Cold Start Items <i>Fahad Anwaar Hammad Afzal Raheel Nawaz Naima Altaf</i> <i>Journal of Computational Science</i> , Volume 29, Pages 9-18 Impact Factor: 2.502 Quartile: 2 Citations: 54 DOI: 10.1016/j.jocs.2018.09.008	2018
Overlapping White Blood Cells Detection based on Watershed Transform and Circle Fitting <i>M. Mohsin Riaz Abdul Ghafoor Naima Altaf Komal Nain Sukhia</i> <i>Radioengineering</i> , Volume 26, No. 4, Pages 1177-1181 Impact Factor: 1.048 Quartile: 4 Citations: 8 DOI: 10.13164/re.2017.1177	2017
An Efficient Eulerian Video Magnification Technique for Micro-biology Applications <i>M. Mohsin Riaz Abdul Ghafoor Naima Altaf Maemoona Kyani</i> <i>Radioengineering</i> , Vol:2017, Issue: 01, Pages:316-322 Impact Factor: 1.048 Quartile: 4 Citations: 5 DOI: 10.13164/re.2017.0316	2017
Image Contrast Enhancement Using Weighted Transformation Function <i>Abdul Ghafoor Muhammad Mohsin Riaz Asma Jabeen Naima Altaf</i> <i>IEEE Sensors Journal</i> , Volume: 16, Issue: 20, Page(s): 7534-7536 Impact Factor: 2.512 Quartile: 1 Citations: 18 DOI: 10.1109/JSEN.2016.2600483	2016
An Effective Model for Indirect Trust Computation in Pervasive Computing Environment	2014

Naima Altaf Abdul Ghafoor Usman Zia Mukhtar Hussain
Wireless Personal Communications, Volume: 75 Issue: 3 Pages: 1689-1713 Special Issue: SI
Impact Factor: 0.653 | **Quartile:** 4 | **Citations:** 5
DOI: 10.1007/s11277-013-1299-1

A mechanism for detecting dishonest recommendation in indirect trust computation 2013
Naima Altaf Abdul Ghafoor Usman Zia
EURASIP Journal on Wireless Communications and Networking, Article Number: 189
Impact Factor: 0.805 | **Quartile:** 3 | **Citations:** 32
DOI: 10.1186/1687-1499-2013-189

Modeling interaction using trust and recommendation in ubiquitous computing environment 2012
Abdul Ghafoor Naima Altaf Mukhtar Hussain
EURASIP Journal on Wireless Communications and Networking, Vol. 119, Pages 13
Impact Factor: 0.540 | **Quartile:** 4 | **Citations:** 17
DOI: 10.1186/1687-1499-2012-119

Conference Proceedings

Remote Sensing Cross-Modal Text-Image Retrieval Using Multi-Grade Dynamic Feature Fusion 2025
Fatima Ali Naima Iltaf Usman Zia
2025 International Conference on Communication Technologies, ComTech 2025, res.country(177,)
Citations: N/A
DOI: 10.1109/ComTech65062.2025.11034565

Metadata based Cross-Domain Recommender Framework using Neighborhood Mapping 2023
Rabia Khan Naima Iltaf Muhammad Umar Shafiq Fawad ur Rehman Obaidullah
2023 IEEE Asia-Pacific Conference on Computer Science and Data Engineering, CSDE 2023, res.country(71,)
Citations: N/A
DOI: 10.1109/CSDE59766.2023.10487686

Diagnosis and Identification of Citrus Canker Growth Rate Using Machine Learning 2023
Naureen Zainab Hammad Afzal Fahim Arif Abdul Ghafoor Naima Iltaf Muhammad Zakria Muhammad Javed Rafia Ahsan
2023 IEEE 4th International Conference on Pattern Recognition and Machine Learning (PRML), res.country(48,)
Citations: 1
DOI: 10.1109/PRML59573.2023.10348188

Improving Software Product Line Challenges in Globally Distributed Environment Using Modern Strategies 2023
Azaz Ahmed Kiani Dr Naima Iltaf Yaser Hafeez Javaria Javaid Fahad Burhan Ahmed Ghayour Abbas
4th International Conference on Communication Technologies, ComTech 2023, res.country(177,)
Citations: N/A
DOI: 10.1109/ComTech57708.2023.10165120

Co-Clustering based Hybrid Collaborative Filtering Model 2023
Aammna Dr Naima Iltaf Dr Hammad Afzal Ain, Qurat Ul
4th International Conference on Communication Technologies, ComTech 2023, res.country(177,)
Citations: N/A
DOI: 10.1109/ComTech57708.2023.10165021

Electricity Theft Detection Via Deep Learning 2023
Sehrish Farid Dr Naima Iltaf Dr Hammad Afzal
4th International Conference on Communication Technologies, ComTech 2023, res.country(177,)
Citations: N/A
DOI: 10.1109/ComTech57708.2023.10164983

Detection and Analysis of Mental Health Illness using Social Media 2023
Rabia Qayyum Hammad Afzal Khawir Mahmood Naima Iltaf
4th International Conference on Communication Technologies, ComTech 2023, res.country(177,)
Citations: N/A
DOI: 10.1109/ComTech57708.2023.10165143

A Hybrid Collaborative Filtering Technique for Web Service Recommendation using Contextual Attributes of Web Services 2022
Naima Iltaf Mahmood Ul Hassan Noor Ul Ain Ali Irfan

2022 Second International Conference on Distributed Computing and High Performance Computing (DCHPC), res.country(107,)

Citations: N/A

DOI: 10.1109/DCHPC55044.2022.9732157

DTMSim-IoT: A Distributed Trust Management Simulator for IoT Networks

2020

Naima Altaf Syed Wasif Abbas Hamdani Abdul Waheed Khan Mian Muhammad Waseem Iqbal

2020 IEEE Intl Conf on Dependable, Autonomic and Secure Computing, Intl Conf on Pervasive Intelligence and Computing, Intl Conf on Cloud and Big Data Computing, Intl Conf on Cyber Science and Technology Congress (DASC/PiCom/CBDCoM/CyberSciTech) , res.country(38,)

Citations: 2

DOI: doi: 10.1109/DASC-PiCom-CBDCoM-CyberSciTech49142.2020.00091

Novel Approach Using Deep Learning for Intrusion Detection and Classification of the Network Traffic

2020

Fahim Arif Shahbaz Ahmad Zabeehullah Naima Iltaf

IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA), res.country(221,)

Citations: 8

DOI: 10.1109/CIVEMSA48639.2020.9132744

Using Trust in Collaborative Filtering for Recommendations

2019

Farah Saleem naima iltaf hammad Afzal mubeena Shahzad

2019 IEEE 28th International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE), res.country(109,)

Citations: 6

DOI: 10.1109/WETICE.2019.00053

A Deep Learning Framework to Predict Rating for Cold Start Item Using Item Metadata

2019

Fahad Anwaar naima iltaf hammad Afzal Haider Abbas

2019 IEEE 28th International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE), res.country(109,)

Citations: 5

DOI: 10.1109/WETICE.2019.00071

Trust management for SOA based social WoT system

2018

Sabeen Javaid Hammad Afzal Fahim Arif Naima iltaf

International Conference on Advanced Communication Technology, ICACT, res.country(121,)

Citations: N/A

DOI: 10.23919/ICACT.2018.8323767

Extension of Semantic Based Urdu Linguistic Resources Using Natural Language Processing

2017

komal khalid Hammad Afzal faiza moqaddas naima iltaf ahmed muqeen sheri raheel nawaz

Proceedings - 2017 IEEE 15th International Conference on Dependable, Autonomic and Secure Computing, 2017 IEEE 15th International Conference on Pervasive Intelligence and Computing, 2017 IEEE 3rd International Conference on Big Data Intelligence and Computing and 2017 IEEE Cyber Science and Technology Congress, DASC-PiCom-DataCom-CyberSciTec 2017 , res.country(233,)

Citations: 8

DOI: 10.1109/DASC-PiCom-DataCom-CyberSciTec.2017.214

An Attack Resistant Method for Detecting Dishonest Recommendation in Pervasive Computing Environment

2012

Naima Iltaf Abdul Ghafoor usman Zia

2012 18th IEEE International Conference on Networks (ICON), res.country(197,)

Citations: 4

DOI: 10.1109/ICON.2012.6506554

Editorial Activities

[illegible]