

SEEMAB LATIF

Associate Professor

School of Electrical Engineering and Computer Science

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About

Dr. SEEMAB LATIF is working as Associate Professor in the School of Electrical Engineering and Computer Science. Dr. SEEMAB LATIF has a PhD in Artificial Intelligence. Dr. SEEMAB LATIF has published 52 research articles & conference papers having a citation count of 385, carried out 7 projects and filed 7 intellectual property.

Qualifications

PhD in Artificial Intelligence University of Manchester , England	2006 - 2010
MS in Artificial Intelligence NUST, Islamabad , Pakistan	2004 - 2006
BS in Software Engineering Fatima Jinnah Women University , Pakistan	2000 - 2004

Experience

Associate Professor School of Electrical Engineering and Computer Science	2021- Present
Assistant Professor School of Electrical Engineering and Computer Science	2016 - 2021
Assistant Professor School of Electrical Engineering and Computer Science	2015 - 2016
Assistant Professor Military College of Signals	2012 - 2015
Assistant Professor Military College of Signals	2010 - 2012

Awards

University Best Innovator University Best Innovator Award for year 2019	2020
School Best Teacher Award School Best Teacher Award for year 2015-16	2018

Professional Memberships

ACM	Since 2019
IEEE	Since 2017

Research Projects

National Projects

SummltUp Content Summary Generator	2019
Funding Agency: IGNITE	
Amount: PKR 65,000.00	
Status: Completed	
Generating Plausible Counterfactual Explanations using Transformers in Natural Language based Financial Forecasting (NLFF)	2022
Funding Agency: HEC	
Amount: PKR 19,892,000.00	
Status: Completed	
Smart Device for Non Invasive Fetal Analysis & Diagnosis (Meternal - Aid)	2019
Funding Agency: NUST	
Amount: PKR 300,000.00	
Status: Approved_inprocess	
Beyond Data	2019
Funding Agency: HEC	
Amount: PKR 9,600,000.00	
Status: Completed	
AAWAZ	2017
Funding Agency: HEC	
Amount: PKR 6,400,000.00	
Status: Completed	

International Projects

Industry Projects

National Projects

5th Quarterly Payment of NUST-OneScreen Collaboration	2023
Client: OneScreen Solution (registered as Clarylcon)	
Amount: PKR 756,839.00	
Status: Completed	
AAWAZ AI TECH	
Client: HEC	
Amount: PKR 7,000,000.00	
Status: Completed	

International Projects

Research Articles

DRIFTNET-EnVACK: Adaptive Drift Detection in Cloud Data Streams with Ensemble Variational Auto-encoder Featuring Contextual Network	2024
Tajwar Mehmood Seemab Latif Rabia Latif Hammad Majeed Asad Waqar Malik	
IEEE Access , Volume 12, Pages 80020-80034	
Impact Factor: 3.400 Quartile: 2	
DOI: 10.1109/ACCESS.2024.3409433	
Multi-modal LSTM network for anomaly prediction in piston engine aircraft	2024
Waqas Rauf Khattak Ahmad Salman Salman Abdul Ghafoor Seemab Latif	
Heliyon , Volume 10, Issue 3, Article Number e25120	
Impact Factor: 4.0 Quartile: 2 Citations: 5	
DOI: 10.1016/j.heliyon.2024.e25120	
LSTMDD: an optimized LSTM-based drift detector for concept drift in dynamic cloud computing	2024
Tajwar Mehmood Seemab Latif Nor Shahida Mohd Jamail Asad Waqar Malik Rabia Latif	
PeerJ Computer Science , Volume 10, Article Number e1827	
Impact Factor: 3.8 Quartile: 2 Citations: 3	
DOI: https://doi.org/10.7717/peerj-cs.1827	

Assessing Urdu Language Processing Tools via Statistical and Outlier Detection Methods on Urdu Tweets <i>Zoya Seemab Latif Hammad Majeed Rabia Latif Nor Shahida Mohd Jamail</i> <i>ACM Transactions on Asian and Low-Resource Language Information Processing</i> , Volume 22, Issue 10, Article Number 234 Impact Factor: 2.0 Quartile: 4 Citations: 5 DOI: https://doi.org/10.1145/3622939	2023
A Novel Cloud Management Framework for Trust Establishment and Evaluation in a Federated Cloud Environment <i>Rabia Latif Syeda Hadia Afzaal Seemab Latif</i> <i>The Journal of Supercomputing</i> , Volume 77, Pages 12537-12560 Impact Factor: 2.557 Quartile: 2 Citations: 9 DOI: https://doi.org/10.1007/s11227-021-03775-8	2021
Analyzing LDA and NMF Topic Models for Urdu Tweets via Automatic Labeling <i>Zoya Seemab Latif Faisal Shafait Rabia Latif</i> <i>IEEE Access</i> , Volume 9, Pages 127531-127547 Impact Factor: 3.367 Quartile: 2 Citations: 28 DOI: 10.1109/ACCESS.2021.3112620	2021
T-Smart: Trust Model for Blockchain Based Smart Marketplace <i>Muhammad Waleed Rabia Latif Bello Musa Yakubu Majid Iqbal Khan Seemab Latif</i> <i>Journal of Theoretical and Applied Electronic Commerce Research</i> , Volume 16(6), Pages 2405-2423 Impact Factor: 5.318 Quartile: 2 Citations: 14 DOI: https://doi.org/ 10.3390/jtaer16060132	2021
A novel trust management model for edge computing <i>Rabia Latif Malik Uzair Ahmed Shahzaib Tahir Seemab Latif Mian Muhammad Waseem Iqbal Awais Ahmad</i> <i>Complex & Intelligent Systems</i> , Pages 1-17 Impact Factor: 4.927 Quartile: 2 Citations: 11 DOI: https://doi.org/10.1007/s40747-021-00518-3	2021
Reducing Arm Fatigue in Virtual Reality by Introducing 3D-Spatial Offset <i>Hasan Iqbal Seemab Latif Yukang Yan Chun Yu Yuanchun Shi</i> <i>IEEE Access</i> , Volume 9, Pages 64085-64104 Impact Factor: 3.476 Quartile: 2 Citations: 13 DOI: 10.1109/ACCESS.2021.3075769	2021
Predicting Risk of Antenatal Depression and Anxiety Using Multi-Layer Perceptrons and Support Vector Machines <i>Fajar Javed Syed Omer Gilani Seemab Latif Asim Waris Mohsin Jamil Ahmed Waqas</i> <i>Journal of Personalized Medicine</i> , Volume 11(3), Article Number 199 Impact Factor: 4.433 Quartile: 1 Citations: 20 DOI: https://doi.org/10.3390/jpm11030199	2021
Malicious Insider Attack Detection in IoTs Using Data Analytics <i>Ahmed Yar Khan Rabia Latif Seemab Latif Shahzaib Tahir Gohar Batool Tanzila Saba</i> <i>IEEE Access</i> , Volume 8, Pages 11743 - 11753 Impact Factor: 3.367 Quartile: 2 Citations: 85 DOI: 10.1109/ACCESS.2019.2959047	2020
An Adaptive Rule-Based Approach to Resolving Real-Time VoIP Wholesale Billing Disputes <i>Nazish Yaqoob Asif Yaseen Seemab Latif Haider Abbas Rabia Latif</i> <i>Journal of Information Science and Engineering</i> , Volume 33, No. 6, Special Issue: SI, Pages 1433-1446 Impact Factor: 0.327 Quartile: 4 Citations: 1 DOI: https://doi.org/10.6688/JISE.2017.33.6.3	2017
Performance evaluation of Enhanced Very Fast Decision Tree (EVFDT) mechanism for distributed denial-of-service attack detection in health care systems <i>Seemab Latif Ashraf Masood Haider Abbas Rabia Latif</i> <i>Annals of Telecommunications</i> , Volume 71, Issue 9-10, Pages 477-487 Impact Factor: 1.412 Quartile: 3 Citations: 10 DOI: 10.1007/s12243-016-0495-x	2016
A Mobile Application to Improve Learning Performance of Dyslexic Children with Writing Difficulties	2016

Rabbia Tariq Seemab Latif
Educational Technology & Society, Volume 19, Issue 4, Pages 151-166
Impact Factor: 1.584 | Quartile: 2

Distributed Denial of Service Attack Source Detection Using Efficient Traceback Technique (ETT) in Cloud-Assisted Healthcare Environment 2016

Rabia Latif Seemab Latif Haider Abbas Ashraf Masood
Journal of Medical Systems, -
Impact Factor: 2.456 | Quartile: 2 | Citations: 10
DOI: <https://doi.org/10.1007/s10916-016-0515-4>

Distributed denial of service (DDoS) attack detection using data mining approach in cloud-assisted wireless body area networks 2016

Rabia Latif Haider Abbas Seemab Latif
International Journal of Ad Hoc and Ubiquitous Computing, Volume 23, Issue 1-2, Pages 24-35, Special Issue SI
Impact Factor: 0.705 | Quartile: 4
DOI: 10.1504/IJAHUC.2016.10000196

EVFDT: An Enhanced Very Fast Decision Tree Algorithm for Detecting Distributed Denial of Service Attack in Cloud-Assisted Wireless Body Area Network 2015

Rabia Latif Haider Abbas Seemab Latif Ashraf Masood
Mobile Information Systems, NULL
Impact Factor: 1.462 | Quartile: 2 | Citations: 20
DOI: <http://dx.doi.org/10.1155/2015/260594>

Conference Proceedings

NUST Titans at SemEval-2025 Task 11: AfroEmo: Multilingual Emotion Detection with Adaptive Afro-XLM-R 2025

Mehwish Fatima Maham Khan Hajra Binte Naeem Faiza Khan Laiba Rana SEEMAB LATIF Raja Khurram Shahzad
Proceedings of the 19th International Workshop on Semantic Evaluation (SemEval-2025), res.country(12,)
Citations: N/A
DOI: <https://aclanthology.org/2025.semeval-1.289/>

FinRL Contest 2025 Task 1:Market-Aware In-Context Learning Framework for Proximal Policy Optimization in Stock Trading Using DeepSeek 2025

Sahar Arshad Huma Ameer Nikhar Azhar SEEMAB LATIF
Proceedings - 2025 IEEE 11th International Conference on Intelligent Data and Security, IDS 2025, res.country(233,)
Citations: N/A
DOI: 10.1109/IDS66066.2025.00024

News Credibility Identification on Facebook 2025

Maha Zainab Asad Ali Shah Sharifullah Khan SEEMAB LATIF Safdar Abbas Khan Abdulwahab Ali Almazroi
2025 International Conference on Innovation in Artificial Intelligence and Internet of Things (AIIT), res.country(192,)
Citations: N/A
DOI: 10.1109/AIIT63112.2025.11082752

NUST Omega at RIRAG 2025: Investigating Context-Aware Retrieval and Answer Generation-Lessons Learned and Challenges 2025

Huma Ameer Muhammad Hannan Akram SEEMAB LATIF Mehwish Fatima
COLING 2025 , res.country(2,)
Citations: N/A
DOI: Nil

NUST Alpha at RIRAG 2025: Fusion RAG for Bridging Lexical and Semantic Retrieval and Question Answering 2025

Muhammad Rouhan Faisal Faizyab Ali Shah Muhammad Abdullah Shalina Riaz Huma Ameer SEEMAB LATIF Mehwish Fatima
COLING 2025 , res.country(2,)
Citations: N/A
DOI: Nil

NUST Nova at RIRAG 2025: A Hybrid Framework for Regulatory Information Retrieval and Question Answering 2025

SEEMAB LATIF Mehwish Fatima Mariam Babar Khan Huma Ameer
31st International Conference on Computational Linguistics (COLING 2025), res.country(2,)

Citations: N/A	
DOI: Nil	
Personality Prediction using Multiple Textual Datasets and Deep Learning Models	2024
<i>Arsalan Shaukat SEEMAB LATIF Faiza Arshad</i>	
<i>2024 International Conference on Frontiers of Information Technology, FIT 2024, res.country(177,)</i>	
Citations: N/A	
DOI: 10.1109/FIT63703.2024.10838446	
Event-Driven Investment Recommendations using Synthesized Financial News for Stock Market	2024
<i>SEEMAB LATIF Sana Sajid Sahar Arshad Nikhar Azhar Huma Ameer</i>	
<i>8th International Conference on Applied Economics and Business, res.country(57,)</i>	
Citations: N/A	
DOI: https://doi.org/10.1007/978-3-031-77363-1_7	
Fine-tuning Urdu NER Models Using Context-Aware Embeddings	2024
<i>SEEMAB LATIF Sahar Arshad Nikhar Azhar</i>	
<i>Proceedings - 2024 14th International Conference on Software Technology and Engineering, ICSTE 2024, res.country(48,)</i>	
Citations: N/A	
DOI: 10.1109/ICSTE63875.2024.00030	
Interpretability in Financial Forecasting: The Role of eXplainable AI in Stock Market	2024
<i>SEEMAB LATIF Hira Tanveer Sahar Arshad Huma Ameer</i>	
<i>2024 14th International Conference on Software Technology and Engineering (ICSTE), res.country(48,)</i>	
Citations: N/A	
DOI: 10.1109/ICSTE63875.2024.00039	
NLPColab at FigNews 2024 Shared Task: Challenges in Bias and Propaganda Annotation for News Media	2024
<i>Hammad Afzal SEEMAB LATIF Sadaf Abdul Rauf Huda Sarfraz Saadia Ishtiaq Nauman Arooj Fatima Sadaf Ziafat Alishba Abdul Suboor</i>	
<i>Proceedings of The Second Arabic Natural Language Processing Conference, res.country(217,)</i>	
Citations: N/A	
DOI: 10.18653/v1/2024.arabicnlp-1.61	
Leveraging Large Language Models and Prompt Settings for Context-Aware Financial Sentiment Analysis	2024
<i>SEEMAB LATIF Rabbia Ahmed Sadaf Abdul Rauf</i>	
<i>2024 5th International Conference on Advancements in Computational Sciences, ICACS 2024, res.country(177,)</i>	
Citations: N/A	
DOI: DOI: 10.1109/ICACS60934.2024.10473283	
Text Summarization from Judicial Records using Deep Neural Machines	2022
<i>Ayesha Sarwar Seemab Latif Rabia Irfan Adnan ul-Hassan Faisal Shafait</i>	
<i>International Conference on Electrical, Computer, Communications and Mechatronics Engineering, ICECCME 2022, res.country(154,)</i>	
Citations: N/A	
DOI: 10.1109/ICECCME55909.2022.9987795	
Comparison of Transformer Models for Information Extraction from Court Room Records in Pakistan	2022
<i>Nida Ahmed Seemab Latif Rabia Irfan Adnan ul-Hassan Faisal Shafait</i>	
<i>International Conference on Electrical, Computer, Communications and Mechatronics Engineering, ICECCME 2022, res.country(154,)</i>	
Citations: 1	
DOI: 10.1109/ICECCME55909.2022.9988642	
Dynamic Big Data Drift Visualization of CPU and Memory Resource Usage in Cloud Computing	2022
<i>Tajwar Mehmood Seemab Latif</i>	
<i>Artificial Intelligence Applications and Innovations AIAI 2022, res.country(88,)</i>	
Citations: 1	
DOI: 10.1007/978-3-031-08333-4_3	
Roman Urdu Sentiment Analysis Using Pre-trained DistilBERT and XLNet	2022
<i>Nikhar Azhar Seemab Latif</i>	
<i>Fifth International Conference of Women in Data Science, res.country(192,)</i>	
Citations: 2	
DOI: 10.1109/WiDS-PSU54548.2022.00027	

Students Personality Assessment using Deep Learning from University Admission Statement of Purpose <i>Salma Kulsoom Seemab Latif Tanzila Saba Rabia Latif</i> 2022 7th International Conference on Data Science and Machine Learning Applications (CDMA) , res.country(192,) Citations: 2 DOI: 10.1109/CDMA54072.2022.00042	2022
Question Classification Using Universal Sentence Encoder and Deep Contextualized Transformer <i>Najam Arif Seemab Latif Rabia Latif</i> 14th International Conference on Developments in eSystems Engineering (DeSE), res.country(2,) Citations: N/A DOI: 10.1109/DeSE54285.2021.9719473	2021
Fine Tuning BERT for Unethical Behavior Classification <i>Syeda Faizan Fatima Seemab Latif Rabia Latif</i> IEEE 2021 International Conference on Digital Futures and transformative Technologies (ICoDT2),, res.country(177,) Citations: 1 DOI: 10.1109/ICoDT252288.2021.9441540	2021
From Transformers to Reformers <i>Nauman Riaz Seemab Latif Rabia Latif</i> International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,) Citations: 4 DOI: 10.1109/ICoDT252288.2021.9441516	2021
Transfer Learning Grammar for Multilingual Surface Realisation <i>Atif Khurshid Seemab Latif Rabia Latif</i> IEEE 2021 International Conference on Digital Futures and transformative Technologies (ICoDT2), res.country(177,) Citations: N/A DOI: 10.1109/ICoDT252288.2021.9441522	2021
A Survey of Sentiment Analysis of Internet Textual Data and Application to Pakistani YouTube User Comments <i>Mehwish Rani Seemab Latif Muhammad Ali Tahir Rafia Mumtaz</i> IEEE International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,) Citations: 3 DOI: https://doi.org/10.1109/ICoDT252288.2021.9441524	2021
Sentiment Analysis on COVID Tweets: An Experimental Analysis on the Impact of Count Vectorizer and TF-IDF on Sentiment Predictions using Deep Learning Models <i>Ghulam Musa Raza Zainab Saeed Butt Seemab Latif Abdul Wahid</i> 2021 International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,) Citations: 21 DOI: 10.1109/ICoDT252288.2021.9441508	2021
Crowdsourcing Cybercrimes through Online Resources <i>Naila Amir Rabia Latif Narmeen Shafqat Seemab Latif</i> IEEE 13th International Conference on Developments in eSystems Engineering (DeSE), res.country(231,) Citations: 1 DOI: 10.1109/DeSE51703.2020.9450747	2020
MAD-Malicious Activity Detection Framework in Federated Cloud Computing <i>Akash Gerard Rabia Latif Seemab Latif Mian Muhammad Waseem Iqbal Tanzila Saba Naqash Gerard Waseem Iqbal</i> IEEE 13th International Conference on Developments in eSystems Engineering (DeSE), res.country(231,) Citations: 2 DOI: 10.1109/DeSE51703.2020.9450728	2020
Backward-Forward Sequence Generative Network for Multiple Lexical Constraints <i>Seemab Latif Sarmad Bashir Mir Muntasar Ali Agha Rabia Latif Seemab Latif Sarmad Bashir Mir Muntasar Ali Agha Rabia Latif</i> AIAI 2020 16th International Conference on Artificial Intelligence Applications and Innovations, res.country(88,) Citations: 1 DOI: https://doi.org/10.1007/978-3-030-49186-4_4	2020
i* (iStar) Security Hierarchy for Cloud Computing <i>Fiza Saher Faizan Seemab Latif Rabia Latif Fiza Saher Faizan Seemab Latif Rabia Latif</i>	2019

14th International Conference on Software Engineering Advances, res.country(68,)	
Citations: N/A	
DOI: icsea_2019_4_40_18001	
Prediction Of Cloud Computing Resource Utilization	2018
<i>Tajwar Mehmood Seemab Latif Sheheryaar Malik</i>	
15th International Conference on Smart Cities: Improving Quality of Life Using ICT & IoT (HONET-ICT) res.country(177,)	
Citations: 21	
DOI: 10.1109/HONET.2018.8551339	
Synthesis of an Adaptive CPR Filter for Identification of Vehicle Make & Type	2014
<i>Ahmed Bilal Awan Saad Rehman Seemab Latif</i>	
2014 National Software Engineering Conference , res.country(177,)	
Citations: 9	
DOI: 10.1109/NSEC.2014.6998236	
Analyzing feasibility for deploying very fast decision tree for DDoS attack detection in cloud-assisted WBAN	2014
<i>Rabia Latif Haider Abbas Saïd Assar Seemab Latif</i>	
10th International Conference, ICIC 2014, res.country(48,)	
Citations: 13	
DOI: 10.1007/978-3-319-09333-8_57	

Book Chapters

Designing an Assistive Learning Aid for Writing Acquisition: A Challenge for Children with Dyslexia	2015
<i>Rabbia TARIQ Shehla TARIQ Rabia LATIF seemab latif</i>	
In: <i>Book on Studies in Health Technology and Informatics-Assistive Technology</i> , NULL	
Citations: 4	
DOI: 10.3233/978-1-61499-566-1-180	

Editorial Activities

Reviewed Papers for Journals	2018
Impact Factor: 3.818	

Intellectual Property

Copyrights

Numeric Data to Text Translation	2020
Status: Filed	
PDF Financial Table Extraction API	2020
Status: Filed	
SUMM-IT-UP- A Content Summary Generator	2019
Status: Filed	
Emotion Identification and Analysis on Call Center Audio	2019
Status: Filed	
Language Learning Application for Children with Special Needs, using Deep Learning	2019
Status: Filed	

Patents

Asynchronous Backward-Forward Sequence Generative Approach for Sentence Generation using Multiple Lexical Constraints	2019
Status: Filed	
Discovery AAC	2019
Status: Filed	

Industrial Designs

Trademarks

Trainings

Advanced AI Bootcamp on Large Language Models (LMM) Partner: Ashar Aziz Foundation (SkyLabs) Duration: 30-May-2024 to 29-Aug-2024	2024
Advanced AI Bootcamp on Deep Neural Networks (DNN) Partner: Ashar Aziz Foundation Duration: 11-Aug-2023 to 17-Nov-2023	2023