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Research gate: <https://www.researchgate.net/profile/Rahman-Ali-3>



1. **SUMMARY:** Summary of the qualification, research projects and publications, experience and many more

[Impact Factor of 120, PhD Best Thesis AWARD, 35 Journal Publications, 28 Conferences, 01 Patent, 03 Book, 15 Years of Teaching and Research Experience]

- Working as an *Assistant Professor* at the University of Peshawar, since 2009.
- Awarded with *PhD degree in Computer Engineering (specialization in artificial intelligence)* from Kyung Hee University, South Korea, in 2016 with dissertation titled “*Accurate classifier selection methodology using multi-criteria decision making and meta-learning*”.
- Earned “*Best PhD Thesis Award*” in 2016.
- *Research interests* include: artificial intelligence, deep learning, machine learning, data mining, data science, decision support systems, recommender systems and natural language processing.
- More than *15 years teaching & research experience* at National and International Universities.
- Have *35 journals publications with 120 impact factor, 01 Korean patent, 28 international conference papers*
- Have successfully completed/worked in more than 10 research projects, in the areas of research interest, at national and international level.
- Authored *THREE books* for undergraduate and master level students.
- Worked as *Research Assistant* at Kyung Hee University, *South Korea* for 04-Years
- Worked as *Research Associate* at the University of Maine, *Le Mans, France* for 06-Months.
- Attended several National & International conferences for presenting research papers.
- *Best paper presentation award* in international conferences held in Toyama Japan, 2018.
- *Citation: 1386 H-index: 22 i-10: 27*

2. **QUALIFICATION:** Details of the academic qualification earned so far.

PhD in Computer Engineering from Kyung Hee University, South Korea, in 2016.		
S.No.	Degree/Institute	
1.	Ph.D., Computer Engineering (Machine Learning) Kyung Hee University (Global Campus), <i>Department of Computer Engineering, Ubiquitous Computing Lab., South Korea.</i>	Sept 2012 - August 2016
2.	M.Phil., Artificial Intelligence (Artificial Intelligence) University of Peshawar, Peshawar, Pakistan, Department of Computer Science.	Jan 2006 - May 2009
3.	M.Sc. Computer Science, Hazara University, Mansehra, Pakistan, Department of Computer Science, <i>Govt. PG College No.1, Abbottabad.</i>	Sept 2002 - February 2005
4.	B.Sc. Computer Science, University of Peshawar, Pakistan, <i>Department of Computer Science, Govt. Post Graduate Jahanzeb College, Swat.</i>	Aug 2000 - August 2002
5.	F.Sc. - Higher Secondary School - Engineering, BISE SWAT, Pakistan,	Aug 1997 - July 2000

	<i>Govt. Post Graduate Jahanzeb College, Swat.</i>	
6.	SSC. - High School – Science BISE SWAT, Pakistan, <i>Govt. High School, Kishawara, Swat.</i>	- Jul 1997

3. RESEARCH PROJECTS: Particulars of the ongoing and completed research projects.

S.#	Nature of Research	Name of Institution	Name of Professor
10	<p>Name of the Project: Design & Development of Artificial Intelligence-based System for Accurate Selection of Deserving Donee for Charitable Donation.</p> <p>Duration: April 2021 – Dec 2021</p> <p>Project Main Features: This research project is focused on the Design & Development of an Intelligent Decision Support Systems (IDSSs) using Artificial Intelligence technologies to facilitate NGOs/NPOs in accurate ranking and selection of most deserving donee for charity. The tools/technology and methods used are Multicriteria Decision Making, such as TOPSIS, AHP, ANP and Machine Learning.</p> <p>Publications: https://saiconference.com/FTC</p>	Zayed University, Abu Dhabi, UAE	Prof. Dr. Asad Masood Khatak
9	<p>Name of the Project: A Systematic Review of Artificial Intelligence and Machine Learning Techniques for Cyber Security -</p> <p>Duration: Jan 2020 – March 2020</p> <p>Project Main Features: The project is focused on the comprehensive review of the use of Machine Learning methods and algorithms in the domain of cyber security.</p> <p>Publications: https://link.springer.com/chapter/10.1007/978-981-15-7530-3_44</p>	Zayed University, Abu Dhabi, UAE	Dr. Mohammad Hussain/Mr. Asmat Ali
8	<p>Name of the Project: The use of Artificial Intelligence (Deep Learning Smart City's Data for reduction of Co2 Emission)</p> <p>Duration: Dec 2019 – Feb 2020</p> <p>Project Main Features: This research project investigates and analyze the scenario of Co2 emission in smart city environment using Artificial Intelligence's Deep Learning and IoT-based technologies. The purpose of the project was to proposes a novel, cloud-based Co2 emission reduction framework that automatically recommends the drivers which the most preferred nearest parking slots in congested urban areas. The tools/technology and methods used are Android Application Development, Machine Learning, Multicriteria Decision Making Methods, Weighted Sum Models and many more.</p> <p>Publications: https://tinyurl.com/rhu5sy35</p>	Zayed University, Abu Dhabi, UAE/Islamia College University, Peshawar	Prof. Dr. Farkhund Iqbal and Professor Dr. Muhammad Sajjad

7	<p>Name of the Project: Design and development of an intelligent decision support system for predicting students' academic performance –</p> <p>Duration: April 2019 – July 2019</p> <p>Project Main Features: This research project is focused on the design and development of an intelligent decision support system (IDSS) for predicting students' academic performance prior to their admissions in any academic program or getting promoted to the higher classes in an already enrolled academic program.</p> <p>Publications: https://ieeexplore.ieee.org/document/8900760</p>	Zayed University, Abu Dhabi, UAE	Dr. Saiqa Aleem
6	<p>Name of the Project: Design and development of a flexible framework for automatic selection of machine learning algorithm(s)</p> <p>Duration: August 2017 – January 2018</p> <p>Project Main Features: This research project is focused on the investigation of meta-features extraction of classification problems and meta-learning for the automatic section of optimum performance machine learning algorithm(s).</p> <p>Publications: https://dl.acm.org/citation.cfm?id=3164601</p> <p>Software(s) developed: AlgoSelector: shorturl.at/uJKQW</p>	Zayed University, Abu Dhabi, UAE	Dr. Francis Chow
5	<p>Name of the Project: "Mining Minds Core Technology Exploiting Personal Big Data" Mining Minds - http://www.miningminds.re.kr/</p> <p>Duration: August 2013 – Sept 2016</p> <p>Project Main Features: "Mining Minds" is a novel Artificial Intelligence-based framework aimed at comprehensively mining human's daily life data generated from heterogeneous resources for producing personalized health and wellness support. Mining Minds philosophy revolves around the concepts of data, information, knowledge and service curation, which refer to the discovery, processing, adaptation and evolution of both contents and mechanisms for the provision of high-quality wellbeing services using Artificial Intelligence technologies.</p> <p>Publications:</p> <ol style="list-style-type: none"> https://doi.org/10.1016/j.combiomed.2015.11.013 https://doi.org/10.1016/j.eswa.2017.11.006 https://ieeexplore.ieee.org/document/8319403 https://doi.org/10.1111/exsy.12242 https://doi.org/10.1007/s12193-018-0258-2 <p>Software(s) developed:</p> <ol style="list-style-type: none"> AlgoSelector: https://github.com/intelligent-decision-support-systems/automatic-algorithm-selector Knowledge-based reasoning framework: https://github.com/intelligent-decision-support-systems/knowledge-based-reasoning-framework 	Kyung Hee University, South Korea	Prof. Dr. Sungyoung Lee

4	<p>Name of the Project: Design & Development of Smart Clinical Decision Support System (CDSS) - http://smartcdss.com/</p> <p>Duration: Sept 2012 – Sept 2016</p> <p>Project Main Features: This research project investigates and analyze the scenario of Head & Neck Cancer and design and develop a Smart Clinical Decision Support System (CDSS) that helps in: Authoring HL7 compliance sharable medical knowledge in the form of Arden Syntax MLM, Integration of Evidence-based Research and prediction of Cancer stage.</p> <p>Publications: 1. https://doi.org/10.1016/j.cmpb.2017.07.010 2. https://doi.org/10.1016/j.artmed.2015.09.008</p>	Kyung Hee University, South Korea	Prof. Dr. Sungyoung Lee
3	<p>Name of the Project: The PULSE - Personalized, Ubiquitous Life-care Decision Support System- http://uclab.khu.ac.kr/PULSE/</p> <p>Duration: Sept 2012 – Sept 2015</p> <p>Project Main Features: The project is focused on the use of technologies to provide personalized healthcare services based on activity, emotion recognition and context-awareness. It also deals with diverse datasets such as clinical, social and sensory data for constructing intelligent clinical and personalized Knowledge-Base (KB). A state-of-the-art, standard-based Lifecare Decision Support System is developed which provides recommendations for chronic disease patients (diabetes Mellites).</p> <p>Publications: 1. https://doi.org/10.3390/s150715921 2. http://link.springer.com/chapter/10.1007%2F978-3-319-13102-3_6</p>	Kyung Hee University, South Korea	Prof. Dr. Sungyoung Lee
2	<p>Name of the Project: "ATHENA: Activity-awareness for Human Engaged Wellness Application" - http://uclab.khu.ac.kr/resources/publication/J_177.pdf ; http://uclab.khu.ac.kr/ATHENA/</p> <p>Project Main Features: The project is focused on the development of ATHENA, A Personalized Platform to Promote an Active Lifestyle and Wellbeing of the users Based on Physical, Mental and Social Health Primitives.</p> <p>Publications: 1. http://doi.org/10.3390/s150715772` 2. http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=7454508&tag=1</p> <p>Software Developed: Unified data modeler: https://github.com/leading-light/GUDM</p>	Kyung Hee University, South Korea	Prof. Dr. Sungyoung Lee
1	<p>Name of the Project: Development of a Pashto Machine Translation System</p> <p>Project Main Features: Aim of the project is to development a statistical machine translation system for Pashto language. The responsibilities assigned to me as a research associate included: tokenization and preprocessing of the Pashto language text collected from various</p>	University of Maine, Le Mans, France	Prof. Dr. Holger Schwenk

	online and offline sources		
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4. OTHER ACADEMIC PROJECTS – Particulars of projects, other than research

S.#	Nature of Research	Name of Institution	Name of Professor
1	<p>Name of the Project: Design & Development of Learning Management System (LMS) for Distance Education</p> <p>Location: University of Peshawar, Pakistan</p> <p>Project Main Features: Objective of the project is to analyze existing system of the Directorate and recommend a suitable learning management system (LMS) along with its development for efficiently managing the students, teachers, and parents data with automatic business processes for admission, course registration, examinations, accounts, communication & feedback.</p>	Directorate of Distance Education, University of Peshawar	Prof. Dr. Muhammad Asif Khan Vice-Chancellor

5. RESEARCH PUBLICATIONS: Particulars of all registered/published, submitted/under review patents/journals/conferences

5.1. PATENT: Registered patents in Korea

RESEARCH EXPERIENCE - PATENT		
P.No	Year	Detail: Authors, Title, Applicant, Registration
1	2016	<p>Sungyoung Lee, Rahman Ali. "Unified Data Modeling for Healthcare Data", Applicant: Kyung Hee University Industry-Academy Collaboration Foundation, Commissionaire, Korean Intellectual Property Act, Registration No.: 10-1609816, Registration Date: March 31, 2016.</p> <p>http://uclab.khu.ac.kr/resources/publication/DP_555.pdf</p>

5.2. JOURNALS PUBLICATIONS: Particulars of published/submitted/under review journals

RESEARCH EXPERIENCE - JOURNALS PUBLICATIONS		
J.No	Year	Detail: Authors, Title, Journal, URL, Indexing & Impact Factor
J35	2022	<p>Rahman Ali, Asmat Ali, Farkhund Iqbal, Mohammed Hussain, Farhan Ullah, "Deep Learning Methods for Malware and Intrusion Detection: A Systematic Literature Review", Security and Communication Networks, vol. 2022, Article ID 2959222, 31 pages, 2022. Hindawi.</p> <p>https://www.hindawi.com/journals/scn/2022/2959222/ [SCIE, IF 1.968]</p>
J34	2022	<p>Rahman Ali, Farkhund Iqbal, Muhammad Sadiq Hassan Zada, "Multicriteria Decision Making for Carbon Dioxide (CO2) Emission Reduction", Scientific Programming, vol. 2022, Article ID 2333821, 14 pages, 2022.</p>

		https://doi.org/10.1155/2022/233382 , Hindawi. [SCIE, IF 1.672]
J32	2022	Ali, Wajid, Wanli Zuo, Rahman Ali , Xianglin Zuo, Gohar Rahman, Zuo, X. and Ullah, I.. 2022. Towards Improving Causality Mining using BERT with Multi-level Feature Networks", KSII Transactions on Internet and Information Systems (TIIS), 16(10), pp.3230-3255. Korea Internet Information Society https://papersearch.net/thesis/article.asp?key=3976696 [SCIE, IF 0.972]
J31	2022	Ling X, Wu Y, Ali Rahman , Zhu H. Magnetic Tile Surface Defect Detection Methodology Based on Self-Attention and Self-Supervised Learning. Computational Intelligence and Neuroscience. 2022 Aug 3;2022. https://doi.org/10.1155/2022/3003810 [SCIE, IF 3.12] [Category "W"]
J29	2021	Aman, Fazal, Azhar Rauf, Rahman Ali , Jamil Hussain, and Ibrar Ahmed. "Balancing Complex Signals for Robust Predictive Modeling." Sensors 21, no. 24 (2021): P-8465. https://www.mdpi.com/1424-8220/21/24/8465 [SCIE, IF 3.848] [Category "W"]
J28	2021	Ali, Wajid, Wanli Zuo, Rahman Ali , Xianglin Zuo, and Gohar Rahman. 2021. "Causality Mining in Natural Languages Using Machine and Deep Learning Techniques: A Survey" Applied Sciences 11, no. 21: 10064. https://doi.org/10.3390/app112110064 . [SCIE, IF 2.838] [Category "X"]
J27	2021	Ali, Rahman. , Sajjad, M., Iqbal, F., Zada, M. S. H., & Hussain, M. (2021). Reducing CO2 Emission Using EDA and Weighted Sum Model in Smart Parking System. International Journal of Computer and Information Engineering, 15(2), 107-112. https://tinyurl.com/rhu5sy35
J26	2020	Ud Din, S.; Jan, Z.; Sajjad, M.; Hussain, M.; Ali, Rahman. ; Ali, A.; Lee, S. Secure Exchange of Medical Data Using a Novel Real-Time Biometric-Based Protection and Recognition Method. Electronics 2020, 9, 2013. https://www.mdpi.com/2079-9292/9/12/2013 [SCIE, IF 2.69] [Category "X"]
J25	2020	Khan, Irfan, Xianchao Zhang, Mobashar Rehman, and Rahman Ali . "A literature survey and empirical study of meta-learning for classifier selection." 8 (2020): 10262-10281. https://ieeexplore.ieee.org/abstract/document/8951014/ [SCIE, IF 3.476] [Category "W"]
J24	2019	Zubair Asghar, Ammara habib, Anam Habib, Adil Khan, Rahman Ali , Asad Khattak, "Exploring Deep Neural Networks for Rumor Detection", <i>Journal of Ambient Intelligence and Humanized Computing</i> , Springer, 2019, Pages 1-19. https://link.springer.com/article/10.1007/s12652-019-01527-4 [SCIE, IF 3.662] [Category "W"]
J23	2018	Maqbool Ali, Rahman Ali , Wajahat Ali Khan, Caren Han, Jae Hon bong, Tae Ho Hur, Doyan Kim, Sungyoung Lee, Byeong.Ho Kang. "A data-driven knowledge acquisition system: An end-to-end knowledge engineering process for generating production rules", <i>IEEE Access</i> , Volume 6., Issue 1, December 2018, Pages 15587-15607 https://ieeexplore.ieee.org/document/8319403 [SCIE, IF 3.476] [Category "W"]
J22	2018	Jamil Hussain, Anees Ul Hassan, Rahman Ali , Muhammad Afzal, Shujaat Hussain, Jaehun Bang, Oresti Banos, Muhammad Bilal Amin, Byeong Ho Kang and Sungyoung Lee, "Model-based adaptive user interface based on context and user experience evaluation", <i>Journal of Multimodal User Interfaces</i> , Springer (2018) 12: 1. https://doi.org/10.1007/s12193-018-0258-2 [SCIE-, IF. 1.694] [Category "X"]
J21	2018	Muhammad Afzal, Ph.D. Imran Ali, Rahman Ali , Maqbool Hussain, Taqdir Ali, Wajahat Ali Khan, Muhammad Bilal Amin, Oresti Banos, Sungyoung Lee. "Personalization of wellness recommendations using contextual interpretation". Expert Systems with Application, Elsevier. Volume 96, 15 April 2018, Pages 506-521. https://doi.org/10.1016/j.eswa.2017.11.006 [SCIE, IF. 8.665] [Category "X"]
J20	2018	Rahman Ali , Muhammad Afzal, Muhammad Sadiq, Maqbool Hussain, Taqdir Ali, Asad Masood Khatak, Sungyoung Lee. "Knowledge-Based Reasoning and Recommendation Framework for Intelligent Decision Making". Expert Systems, Wiley Online Library, 7 February 2018. https://doi.org/10.1111/exsy.12242 [SCIE, IF. 2.812] [Category "X"].
J19	2017	Ahmad, Rashid, Mohammad Abid, and Rahman Ali. "Identification and Resolution of Ambiguities using AV Mapping Algorithm for Query Transformation: Ambiguities Resolution for Query Transformation." Proceedings of the Pakistan Academy of Sciences: A. Physical and Computational Sciences 54.4 (2017): 347-364. ["X" Category, IF. 0.0]. http://www.ppaspk.org/index.php/PPAS-A/article/view/359

J18	2017	Taqdir Ali, Maqbool Hussain, Wajahat Ali Khan, Muhammad Afzal, Jamil Hussain, Rahman Ali, et al. , "Multi-model-based interactive authoring environment for creating shareable medical knowledge", <i>Computer Methods and Programs in Biomedicine</i> , <i>Elsevier</i> , Volume 150, October 2017, Pages 41-72 . https://doi.org/10.1016/j.cmpb.2017.07.010 [<i>SCIE, IF. 7.027</i>].
J17	2016	Rahman Ali , Sungyoung Lee, Tae Choong Chung. "Accurate multi-criteria decision-making methodology for recommending machine learning algorithm". <i>Expert System with Application</i> , <i>Elsevier</i> 1;71:257-78, April 2017. https://doi.org/10.1016/j.eswa.2016.11.034 [<i>SCIE, IF. 8.665</i>].
J16	2016	Siddiqi, Muhammad Hameed, Rahman Ali , Muhammad Idris, Adil Mehmood Khan, Eun Soo Kim, Min Cheol Whang, and Sungyoung Lee. "Human facial expression recognition using curvelet feature extraction and normalized mutual information feature selection, "Multimedia Tools and Applications", <i>Springer</i> , (ISSN: 1380-7501, Volume 75 Issue 2, January 2016, Pages 935-959 http://link.springer.com/article/10.1007/s11042-014-2333-3) [<i>SCIE, IF: 2.777</i>].
J15	2016	Rahman Ali , Siddiqi, Muhammad Hameed, Muhammad Afzal, Maqbool Hussain, Maqbool Ali, and Sungyoung Lee, Byeong Ho Kang. "Multimodal Hybrid Reasoning Methodology for Personalized Wellbeing Services". <i>Computers in Biology and Medicine</i> , <i>Elsevier</i> , Volume 69, 1 February 2016, Pages 10-28. https://doi.org/10.1016/j.compbiomed.2015.11.013 [<i>SCI, IF. 6.698</i>],
J14	2015	Rahman Ali , Muhammad Hameed Siddiqi, and Sungyoung Lee. "Rough set-based approaches for discretization: a compact review." <i>Artificial Intelligence Review</i> , <i>Springer</i> , August 2015, Volume 44, Issue 2 , pp 235–263 https://doi.org/10.1007/s10462-014-9426-2 [<i>SCI, IF: 9.588</i>].
J13	2015	Rahman Ali , Siddiqi, Muhammad Hameed, Jamil Ahmad, Hussain Maqbool, and Sungyoung Lee. "H2RM: A Hybrid Rough Set-based Reasoning Model for Diagnosis and Management of Diabetes Mellitus". <i>Sensors</i> , <i>MDPI</i> , Vol.15, Issue 7, pp.15921-15951, 3rd July 2015. https://doi.org/10.3390/s150715921 [<i>SCIE, IF. 3.848</i>].
J12	2015	Rahman Ali , Siddiqi, Muhammad Hameed, Muhammad Idris, and Sungyoung Lee. "GUDM: Automatic Generation of Unified Datasets for Learning and Reasoning in Healthcare". <i>Sensors</i> , <i>MDPI</i> , Vol.15, Issue 7, pp.15772-15798., 2nd July 2015. http://doi.org/10.3390/s150715772 [<i>SCIE, IF. 3.848</i>]
J11	2015	M Hussain, M Afzal, T Ali, Rahman Ali , WA Khan, A Jamshed, S Lee, BH Kang, and Sungyoung Lee. "Data-driven knowledge acquisition, validation, and transformation into HL7 Arden Syntax". <i>Artificial intelligence in medicine</i> , <i>Elsevier</i> . 2015.09.008, 28th Oct 2015. https://doi.org/10.1016/j.artmed.2015.09.008 [<i>SCI, IF. 7.011</i>],
J10	2015	Siddiqi, Muhammad Hameed, Rahman Ali , Adil Mehmood Khan, Young-Tack Park, and Sungyoung Lee. "Human Facial Expression Recognition Using Stepwise Linear Discriminant Analysis and Hidden Conditional Random Fields. "IEEE Transactions on Image Processing", <i>IEEE</i> , Vol.24, No.4, pp.1386-1398, 24 February 2015. http://doi.org/10.1109/TIP.2015.2405346 [<i>SCI, IF: 11.041</i>].
J9	2015	Ahmed, Ishtiaq, Rahman Ali , Donghai Guan, Young-Koo Lee, Sungyoung Lee, and TaeChoong Chung. "Semi-supervised learning using frequent itemset and ensemble learning for SMS classification." <i>Expert Systems with Applications</i> ", <i>Elsevier</i> , Vol. 42, no. 3 (15 February 2015): 1065-1073. http://www.sciencedirect.com/science/article/pii/S0957417414005363 [<i>SCIE, IF: 8.665</i>].
J8	2014	Siddiqi, Muhammad Hameed, Rahman Ali , Abdul Sattar, Adil Mehmood Khan, and Sungyoung Lee. "Depth Camera-Based Facial Expression Recognition System Using Multilayer Scheme." <i>IETE Technical Review</i> , <i>Taylor & Francis Online</i> , Vol.31, no. 4 (14 Aug 2014): 277-286. http://link.springer.com/article/10.1007/s11042-014-2333-3 [<i>SCIE, IF: 1.932</i>].
J7	2014	Siddiqi, Muhammad Hameed, Rahman Ali , Adil Mehmood Khan, Eun Soo Kim, Gerard Junghyun Kim, and Sungyoung Lee. "Facial expression recognition using active contour-based face detection, facial movement-based feature extraction, and non-linear feature selection." <i>Multimedia Systems</i> , <i>Springer</i> , (20 July 2014): 1-15. http://link.springer.com/article/10.1007/s00530-014-0400-2 [<i>SCI, IF: 2.603</i>].
J6	2014	Fahim, Muhammad, Muhammad Idris, Rahman Ali , Christopher Nugent, Byeong Kang, Eui-Nam Huh, and Sungyoung Lee. "ATHENA: A Personalized Platform to Promote an Active Lifestyle and Wellbeing Based on

		Physical, Mental and Social Health Primitives." Sensors, <i>MDPI</i> , Vol. 14, no. 5 (2014): 9313-9329. http://www.mdpi.com/1424-8220/14/5/9313 [<i>SCIE, IF. 3.848</i>],
J5	2014	Siddiqi, Muhammad Hameed, Rahman Ali , Md Sohel Rana, Een-Kee Hong, Eun Soo Kim, and Sungyoung Lee. "Video-based human activity recognition using multilevel wavelet decomposition and stepwise linear discriminant analysis." Sensors, <i>MDPI</i> , Vol. 14, no. 4 (4 Apr2il 2014): 6370-6392. http://www.mdpi.com/1424-8220/14/5/9313 [<i>SCIE, IF. 3.848</i>].
J4	2013	Rahman Ali , Mohammad Abid Khan, "Second Order Predicate Logic for Pashto Knowledge Representation", Pashto quarterly Journal, Pashto Academy, University of Peshawar, [<i>"Y" Category, IF. 0.0</i>], 2013. https://tinyurl.com/3n9z867j
J3	2011	Mohammad Bilal, Mohammad Abid Khan, Rahman Ali , "An adaptive approach of syntactic ambiguity resolution in Pashto", African Journal of Mathematics and Computer Science Research, [<i>Non-Index, IF. 0.0</i>], Vol. 4(2), pp. 55–63, February 2011. http://www.academicjournals.org/AJMCSR
J2	2011	Rahman Ali , Mohammad Abid Khan, Zaheer Ahmad, Ibrar Ahmad, Muhammad Amir, "A State-of-the Art Review of Corpus Linguistics Journals", <i>PUTAJ Science</i> ,, [<i>Non-Index, IF. 0.0</i>], Vol. 18, pp. 225-240, ISSN 2219-2468, University of Peshawar, Pakistan, 2011. http://putaj.org/index.php/science/issue/view/6
J1	2011	Rahman Ali , Mohammad Abid Khan, "Computational Treatment of Zero Anaphora in Pashto Language", <i>Bilingual Quarterly Research Journal, Pashto</i> , [<i>"Y" Category, IF. 0.0</i>], Vol. 39-40, No: 641s, ISSN: 0555-8158, pp. 1-11, Pashto Academy, University of Peshawar, Sept 2010- Oct 2011. http://pashtoacademy.edu.pk/library/books/image/40.html

5.3. CONFERENCES PAPERS: Particulars of accepted/presented/under review conferences

RESEARCH EXPERIENCE - CONFERENCES PAPERS		
C.No	Year	Detail: Authors, Title, Conference, Date & URL
C28	2021	Rahman Ali , Khatak AM. Multicriteria Decision Making Using TOPSIS Method: An Accurate Selection of Deserving Candidates. In Proceedings of the Future Technologies Conference 2021 Nov 28 (pp. 506-517). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-030-89912-7_39
C27	2019	Rahman Ali , Asmat Ali, Farkhund Iqbal and Asad Masood Khatak "A Systematic Review of Artificial Intelligence and Machine Learning Techniques for Cyber Security", Submitted in ICBDS 2019 - International Conference on Big Data and Security, Nanjing, China, pp. 584-593, 20-22 Dec 2019. https://link.springer.com/chapter/10.1007/978-981-15-7530-3_44 .
C26	2019	Muneeb Ullah, Rahman Ali , Abdullah, Tufail Khan, Mukhtar Ahmad and Farhan Ullah, "Software Cost Estimation – A Comparative Study of COCOMO-II and Bailey-Basili Models", Accepted in AECT2019 - International Conference on Advances in the Emerging Computing Technologies. Islamic University of Madinah, Medina, Saudi Arabia, Dec 08-10, 2019. https://ieeexplore.ieee.org/document/9194166
C25	2019	Fazal Aman, Azhar Rauf, Rahman Ali , Farkhund Iqbal, and Asad Masood Khatak "A Predictive Model for Predicting Students Academic Performance", Accepted in IISA 2019 - The 10th International Conference on Information, Intelligence, Systems and Applications, 15-17 July 2019. https://ieeexplore.ieee.org/document/8900760
C24	2018	Asmat Ali, Rahman Ali , Asad Masood Khatak and, Muhammad Saqlain Aslam, "Large Scale Image Dataset Construction Using Distributed Crawling with Hadoop YARN", 2018 Joint 10th International Conference on Soft Computing and Intelligent Systems (SCIS) and 19th International Symposium on Advanced Intelligent Systems (ISIS), Toyama, Japan, 2018, pp. 394-399. doi: 10.1109/SCIS-ISIS.2018.00075 https://ieeexplore.ieee.org/abstract/document/8716064
C23	2018	Ammara Habib, Saima Akbar, Muhammad Zubair Asghar, Asad Masood, Rahman Ali and Ulfat Batool, "Rumor Detection in Business Reviews Using Supervised Machine Learning", 5th International Conference on Behavioral, Economic, and Socio-Cultural Computing (BESC2018), National University of Kaohsiung, Taiwan / 12-14 November, 2018. https://ieeexplore.ieee.org/document/8697323
C22	2018	Rahman Ali , Asad Masood Khatak, Chow Francis, Sungyoung Lee, "A Case-Based Meta-Learning and Reasoning Framework for Classifiers Selection", 11 th International Conference on Ubiquitous Information Management and Communication, (ACM IMCOM 2018), LANGKAWI, Malaysia, Jan 5-7, 2018, pp 1-6. doi>10.1145/3164541.3164601. https://dl.acm.org/citation.cfm?id=3164601

C21	2015	Wajahat Ali Khan, Muhammad Idris, Taqdir Ali, Rahman Ali , Shujaat Hussain, Maqbool Hussain, Muhammad Bilal Amin, Asad Masood Khattak, Yuan Weiwei, Muhammad Afzal, Sungyoung Lee and Byeong Ho Kang, " Correlating Health and Wellness Analytics for Personalized Decision Making ", 17th International Conference on E-health Networking, Application & Services (Healthcom 2015), Oct 14-17, 2015 http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=7454508&tag=1
C20	2015	Wajahat Ali Khan, Muhammad Bilal Amin, Oresti Banos, Taqdir Ali, Maqbool Hussain, Muhammad Afzal, Shujaat Hussain, Jamil Hussain, Rahman Ali , Maqbool Ali, Dongwook Kang, Jaehun Bang, Tae Ho Hur, Bilal Ali, Muhammad Idris, Asif Razzaq, Sungyoung Lee and Byeong Ho Kang, "Mining Minds: Journey of Evolutionary Platform for Ubiquitous Wellness", 12th International Conference on Ubiquitous Healthcare (u-Healthcare 2015), Osaka, Japan, Nov 30- Dec 02, 2015 http://uclab.khu.ac.kr/resources/publication/C_335.pdf
C19	2015	Banos, O., Bilal Amin, M., Ali Khan, W., Afzel, M., Ahmad, M., Ali, M., Ali, T., Ali, R. , Bilal, M., Han, M., Hussain, J., Hussain, M., Hussain, S., Hur, T. H., Bang, J. H., Huynh-The, T., Idris, M., Kang, D. W., Park, S. B., Siddiqui, M., Vui, L. B., Fahim, M., Khattak, A. M., Kang, B. H. and Lee, S., "An innovative platform for person-centric health and wellness support ", Proceedings of the International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2015), Granada, Spain, April 15-17, 2015. http://link.springer.com/chapter/10.1007%2F978-3-319-16480-9_14
C18	2015	Rahman Ali , Muhammad Hameed Siddiqi, Byeong Ho Kang and Sungyoung Lee, "KARE: A Hybrid Reasoning Approach for Promoting Active Lifestyle", ACM-IMCOM (ICUIMC) 2015, Jan 8-10, 2015 https://dl.acm.org/doi/abs/10.1145/2701126.2701156
C17	2014	Rahman Ali , Muhammad Hameed Siddiqi, Muhammad Idris, Byeong Ho Kang, and Sungyoung Lee, " Prediction of diabetes mellitus based on boosting ensemble modeling", 8th International Conference on Ubiquitous Computing & Ambient Intelligence (UCAmI 2014), Belfast, United Kingdom, December 2-5, 2014. http://link.springer.com/chapter/10.1007%2F978-3-319-13102-3_6
C16	2014	Muhammad Hameed Siddiqi, Rahman Ali , Byeong Ho Kang and Sungyoung Lee, "A New Feature Extraction Technique for Human Facial Expression Recognition Systems using Depth Camera", 6th International Work-conference on Ambient Assisted Living (IWAAL 2014), Belfast, United Kingdom, December 2-5, 2014. http://link.springer.com/chapter/10.1007%2F978-3-319-13105-4_21
C15	2014	Muhammad Hameed Siddiqi, Rahman Ali , Ibrahiem M. M. El Emary and Sungyoung Lee, "An Unsupervised Technique for Automatic Face Detection and Extraction", 2014 International Conference on Information Science, Electronics and Electrical Engineering (IEEE 2014), Sapporo City, Hokkaido, Japan, April 26-28, 2014. http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6946224&tag=1
C14	2011	Rahman Ali , Muhammad Amir, Mohammad Abid Khan "Developing a Pashto Treebank", in <i>International Conference on Networks & Information Technology (ICCNIT)</i> , 2011. University of Peshawar, Pakistan, 2011. http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6020939&tag=1
C13	2010	Zaheer Ahmad, Mohammad Abid Khan, Rahman Ali , Ibrar Ahmad, Muhammad Amir, "Evolving Web Corpus: Text Powered by Non Text", in Conference on Language and Technology, 2010 (CLT10), Islamabad, Pakistan, 2010. http://www.snlp.org.pk/clt10/papers/Evolving%20Web%20Corpus%20Text%20Powered%20by%20Non%20Text.pdf
C12	2009	Mohammad Bilal, Mohammad Abid Khan, Rahman Ali , "Identification of syntactic ambiguities in Pashto text", Accepted in <i>5th International Conference on Emerging Technology (IEEE-ICET2009)</i> , National University of Computer and Emerging Sciences, Islamabad, Pakistan, October 19-20, 2009. http://www.ieeeicet.org/CallForPapers.htm
C11	2009	Rahman Ali , Mohammad Abid Khan M.A, Mushtaq Ali, "Reflexive Anaphora Resolution in Pashto Discourse", in proceeding <i>2nd Conference on Language and Technology (CLT2009)</i> , National University of Computer and Emerging Sciences, Lahore, Pakistan, 22-24 January, 2009, pp. 41-45. http://www.crupl.org/clt09/download/Papers/Paper6.pdf
C10	2009	Rashid Ahmad, Mohammad Abid Khan, Rahman Ali , "Efficient Transformation of Natural Language Query to SQL", in proceeding <i>2nd Conference on Language and Technology (CLT2009)</i> , National University of Computer and Emerging Sciences, Lahore, Pakistan, 22-24 January, 2009, pp 53-60. http://www.crupl.org/clt09/download/Papers/Paper8.pdf
C9	2009	Ihsan Rabbi, Mohammad Abid Khan, Rahman Ali , "Rule-based Part of Speech Tagging for Pashto language", in proceeding <i>2nd Conference on Language and Technology (CLT2009)</i> , National University of Computer and Emerging Sciences, Lahore, Pakistan, 22-24 January 2009, pp 82-87. http://www.crupl.org/clt09/download/Papers/Paper12.pdf

C8	2008	Mushtaq Ali, Mohammad Abid Khan, Rahman Ali , "Ellipses Resolution in WH-Construction in Pashto", in proceeding 12th IEEE International Multitopic Conference (IEEE INMIC 2008), Bahria University Karachi, Pakistan on 23-24 December 2008, pp 436-440. http://www.ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=4777777
C7	2008	Rahman Ali , Mohammad Abid Khan, Rashid Ahmad, "Implementation of the rule-based approach for the resolution of strong personal anaphora in Pashto discourse", in proceeding 12th IEEE International Multitopic Conference (IEEE INMIC 2008), Bahria University Karachi, Pakistan on 23-24 December 2008, pp 501-507. http://www.ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4777790
C6	2008	Rahman Ali , Mohammad Abid Khan, Mohammad Bilal, Ihsan Rabbi, "Reciprocal Anaphora Resolution in Pashto Discourse", in <i>proceeding 4th IEEE International Conference on Emerging Technologies (IEEE—ICET2008)</i> ", College Of Electrical & Mechanical Engineering (EME), Rawalpindi 46000, Pakistan, October 18-19, 2008, pp 1-5. http://www.ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=4777464
C5	2008	Rahman Ali , Mohammad Abid Khan, Mohammad Bilal, Ihsan Rabbi, "Empirical Analysis of Pashto Text for Types of Pashto Anaphora", in <i>proceeding of International Conference on Information & Communication Technology (IC-ICT2008)</i> , University of Science & Technology, Bannu, Pakistan, pp 146-151. https://www.researchgate.net/publication/236461784_Empirical_Analysis_of_Pashto_Text_for_Types_of_Pashto_Anaphora https://www.researchgate.net/publication/236461784_Empirical_Analysis_of_Pashto_Text_for_Types_of_Pashto_Anaphora
C4	2008	Ihsan Rabbi, Mohammad Abid Khan, Rahman Ali , Rashid Ahmad, "Theoretical Analysis of Pashto Phrases for the Creation of Parser", in <i>proceeding of International Conference on Information & Communication Technology (IC-ICT2008)</i> , University of Science & Technology, Bannu, Pakistan, pp 137-140. https://www.researchgate.net/publication/236461795_Theoretical_Analysis_of_Pashto_Phrases_for_the_Creation_of_Parser
C3	2008	Rahman Ali , Mohammad Abid Khan, Rashid Ahmad, Ihsan Rabbi, "Rule Based Personal References Resolution in Pashto Discourse for Better Machine Translation" In <i>Proceedings of Second International Conference on Electrical Engineering (ICEE 2008)</i> , 25-26 March 2008, University of Engineering and Technology, Lahore 54890, Pakistan, pp 57-62. http://www.ieeexplore.ieee.org/iel5/4547431/4553886/04553941.pdf
C2	2008	Ihsan Rabbi, Mohammad Abid Khan, Rahman Ali , " Developing a tagset for Pashto part of speech tagging", in <i>Proceedings of Second International Conference on Electrical Engineering (ICEE 2008)</i> , 25-26 March 2008, University of Engineering and Technology, Lahore 54890, Pakistan, pp. http://www.ieeexplore.ieee.org/iel5/4547431/4553886/04553909.pdf?arnumber=4553909
C1	2007	Rahman Ali , Mohammad Abid Khan, Ihsan Rabbi, "Strong Personal Anaphora Resolution in Pashto Discourse", in <i>Proceedings of Third International Conference on Emerging Technologies (ICET2007)</i> , Riphah International University, Islamabad, Pakistan, November 12-13, 2007, pp 148-154. http://www.ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4516334

6. TEACHING EXPERIENCE: Particulars of the positions worked on, institutes served and the responsibilities fulfilled.

More than 10 Years teaching experience at undergraduate and post graduate levels		
T.No.	Description	
1.	<p>ASSISTANT PROFESSOR IN COMPUTER SCIENCE. BPS-19 QACC, University of Peshawar</p> <ul style="list-style-type: none"> ○ Courses taught: Web mining, Data mining, Machine learning, Algorithm analysis & design, Computer architecture, Distributed system, Logic, Management Information System, Business Information System, Electronic Commerce, Introduction to IT ○ Other responsibility: Serving as coordinator of examination at the College level to manage the examination matters. 	(Oct 2015 - To Date)
2.	<p>LECTURER IN COMPUTER SCIENCE. BPS-18. QACC, University of Peshawar</p> <ul style="list-style-type: none"> ○ Courses taught: Artificial intelligence, Operating System, Data Structure, Automata Theory, Natural Language Processing, Visual basic Programming, Management Information System, Business Information System, System Analysis and Design, Introduction to Computer ○ Other responsibility: Supervising master and undergraduate students' in their final year projects and thesis. Served as a controller of examination at the College level to manage the examination system. 	(Dec 2009 – Oct 2015)
3.	<p>LECTURER IN COMPUTER SCIENCE. BPS-18. IIT, Bunu University of Science & Technology, KP, Pakistan</p> <ul style="list-style-type: none"> ○ Courses taught: System Analysis and Design, Software Engineering ○ Other responsibility: Supervising master and undergraduate students' projects 	(Aug 2009 – Dec 2009)
4.	<p>LECTURER IN COMPUTER SCIENCE. BPS-18. Govt. Degree College, Kabal, Swat, KP, Pakistan</p> <ul style="list-style-type: none"> ○ Courses taught: Introduction to computer, data structure, digital logic and computer design, programming in C/C++, Data structure, Discrete Mathematics, Operating System, Databases Management, Data communication and computer networks ○ Other responsibility: nil 	(Sept 2007 – Aug 2009)
5	<p>TEACHING ASSISTANT. Department of Computer Science, University of Peshawar, KP. Pakistan</p> <ul style="list-style-type: none"> ○ Responsibility: Teaching subjects of Automata Theory and Database Administration at undergraduate level and helping students in semester projects development. 	(Sept 2006 - Sept 2007)

7. BOOKS AUTHORSHIP: Particulars of the books authored on the course related subjects.

B.No	Year	Title	Detail: Authors, Title, Journal, Indexing
3	2020	Introduction to Computer & ICT	<ul style="list-style-type: none"> Intro. To Comp. & ICT book is written in compliance with HEC, Pakistan curriculum for BS programs in Colleges and Universities.
2	2018	Management Information System (MIS)	<ul style="list-style-type: none"> MIS book is written in compliance with HEC, Pakistan curriculum for BS Commerce, BBA, MBA and B.Com students of the Universities. Focus of the book is on the methods and technologies used for promotion of business processes.
1	2016	Computer Science Grade XII – Text Book	<ul style="list-style-type: none"> It is a Text Book written for Higher Secondary School – Part II (F.Sc 2nd Year) under the umbrella of Khyber Pakhtunkhawa Textbook Board, Peshawar, Pakistan. The main contents covered in the book include: <ol style="list-style-type: none"> Operating system its functions and process management (1 Chapter) System development life-cycle describing different steps of the software development (1 Chapter) Object-oriented programming using C++ (7 Chapters)

8. ADMINISTRATIVE EXPERIENCE: Particulars of relevant administrative experience at the academic institutes

S#	Name of Institute / Organization	Period		Responsibility
		From	To	
1	Quaid-e-Azam College of Commerce, University of Peshawar	Dec-2019	Till Date	Coordinator National Vocational & Technical Training Commission, University of Peshawar
2	Directorate of Distance Education, University of Peshawar	Feb-2018	June - 2019	Director Distance Education
3	Quaid-e-Azam College of Commerce, University of Peshawar	Oct-2016	July 2021	Coordinator Examination
4	Quaid-e-Azam College of Commerce, University of Peshawar	Sept-2010	May 2012	Coordinator Examination

9. **EDITOR AND REVIEWER OF JOURNALS:** Particulars of the social research responsibilities performed in the form of acting as reviewer and editor in various research journals.

S#	Name of Journal	Role	Status
8	Applied Sciences, MDPI "Multi-Criteria Decision Making (MCDM) Using Artificial Intelligence (AI)". https://www.mdpi.com/journal/applsci/special_issues/I5935856EE	Lead Guest Editor	Deadline: 20 June 2023
7	Computer, Materials & Continua – Tech Science Press "Big Data Analysis for Healthcare Applications" https://www.techscience.com/cmcspecial_detail/big-data-analytics	Lead Guest Editor	Deadline: 30 May 2023
6	Scientific Programing Journal, Hindawi Publisher - Organized Special Issue on the titled: "AI-enabled Decision Support System: Methodologies, Applications, and Advancements 2021." https://www.hindawi.com/journals/sp/si/120492/	Lead Guest Editor	Closed: 04 Mar 2022
5	Scientific Programing Journal, Hindawi Publisher - Organized Special Issue on the titled: "Intelligent Decision Support Systems Based on Machine Learning and Multicriteria Decision-Making", 2020. https://www.hindawi.com/journals/sp/si/295240/	Lead Guest Editor	Closed: 28 Feb 2020
4	Multimedia Tools and Applications (SCIE Indexed)	Reviewer	Ongoing
3	Information Sciences (SCI Indexed)	Reviewer	Ongoing
2	Expert Systems with Application (SCIE Indexed)	Reviewer	Ongoing
1	IEEE Access (SCIE Indexed)	Reviewer	Ongoing

10. **GITHUB - OPEN SOURCE SOFTWARES:** Particulars of the open source softwares

S#	Name of the Software/tool
3	AlgoSelector: Automatic Algorithm Selection Using Case Based Reasoning https://github.com/intelligent-decision-support-systems/automatic-algorithm-selector
2	Knowledge-based reasoning framework: A framework used to generate recommendations based on already stored knowledge. https://github.com/intelligent-decision-support-systems/knowledge-based-reasoning-framework
1	Unified data modeler: It is a software tool used to fuse heterogeneous datasets into a unified dataset https://github.com/leading-light/GUDM

11. AWARDS/ ACHIEVEMENTS

S#	Name of the AWARD
4	Best PhD thesis Award among all international students of the batch 2016 of the Kyung Hee University, South Korea
3	Kung Hee University (South Korea) presidential scholarship award for PhD study in 2012
2	Second position in MSc Computer Science from the Hazara University, Mansehra in 2005
1	Second position in Secondary School Certificate (SSC) from Govt. High School Kishwara.in 1997

12. Invited Talks/ WORKSHOPS

S#	Invited talks/workshop details
5	Invited Speaker in the Workshop titled: "End-to-End Machine Learning Process using Weka", Organized by Office of Research and Innovation Center, Fatima Jinah Women University, Rawalpindi. Dated 28 th July 2022.
4	Invited Speaker in the Workshop titled: "Two Weeks Special Course on Systematic Methodology of Research and Development", Organized by Center for Human Recourse and Career Development University of Peshawar", dated 2 nd August to 13 th august 2021.
3	Invited Speaker in the Workshop titled: "Research Methodology", Organized by Center for Human Recourse and Career Development University of Peshawar", dated 2 nd August to 13 th august 2021.
2	Invited Speaker in the Workshop titled: "Machine Learning algorithm selection and configuration for prediction and classification problems", Department of Computer Science and Engineering, University of Malaya, Kuala Lumpur, Malaysia, dated 12.01.2018.
1	Lecture (Writing, Citing & Plagiarism), Office of Research, Innovation & Commercialization (ORIC), University of Peshawar, Dec 17 2017

13. PARTICIPATION IN INTERNATIONAL RESEARCH EVENTS/CONFERENCES

AND COUNTRIES VISITED: Particulars of countries visited for participation in research projects, conferences, and higher studies

S#	Name of Country	Duration	Purpose of Visit
1	France: 2012	4 Months	Research Associate - Laboratoire d'Informatique de l'Université du Mans (LIUM)
2	South Korea: 2012-16	4 Years	PhD Study - (Kyung Hee University)
3	United Kingdom: 2014	10 Days	Presentation in a Conference - (UCAml 2014), Belfast, United Kingdom
4	Malaysia: 2018	2 Weeks	Presentation in a Conference - (ACM IMCOM 2018), LANGKAWI, Malaysia
5	United Arab Emirate (UAE): 2018	1 Week	Transit at UAE / Visiting a friend - Zayed University, Abu Dhabi, UAE
6	Japan: 2019	10 Days	Presentation in a Conference - (SCIS-ISIS.2018), Toyama, Japan
7	Kingdom of Saudia Arabia: 2020	15 Days	Presentation in a Conference – (AECT2019), Islamic Univ of Madinah, KSA

14. REFERENCES: Contact details of the employer and supervisor/mentors for relevant queries

S.No.	Name & Designation	Relationship
1.	Prof. Dr. Yorid Ahsan Zia, <i>Principal Quaid-e-Azam College of Commerce, University of Peshawar</i> <i>Khyber Pakhtunkhwa, Pakistan</i> yoridahsanzia@uop.edu.pk	Current Employer Head of Department
2.	Prof. Dr. Asad Masood Khatak, <i>Associate Professor, College of Technological Innovation,</i> <i>Zayed University, Abu Dhabi, UAE</i> asad.khattak@zu.ac.ae	Teacher & Mentor during PhD Study
3.	Dr. Wajahat Ali Khan, <i>Lecturer (Assistant Professor), School of Computing and Engineering, University of Derby, United Kingdom(UK).</i> w.khan@derby.ac.uk	Projects Team Lead during PhD
5.	Prof. Dr. Sungyoung Lee, <i>Director Ubiquitous Computing Lab, Department of Computer Engineering, Kyung Hee University, South Korea.</i> sylee@oslab.khu.ac.kr	PhD Supervisor
6.	Prof. Dr. Muhammad Abid Khan <i>Pro Vice-Chancellor & Prof., Department of Computer Science, University of Peshawar, Peshawar, Pakistan.</i> abid_khan1961@yahoo.com	M.Phil/MS Supervisor