

DR. WAQAS JADOON

Designation: Associate Professor (Tenured)

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Address: Department of Computer Science, COMSATS
University Islamabad, Abbottabad Campus,
KPK 22060 Pakistan



Date of Joining CUI, ATD Campus: March 8, 2010

TTS Appointment Date as Assistant Professor: July 14, 2014

Tenured Associate Professor: April 05, 2021

Post PhD Experience: 9.5 years

Publications Summary:

JCR IF Journal Papers: Published: 25

Conference: 3

Total impact factor of research papers: 56

Citations index: 893 (h-index-12, i10-index-13)

Google Scholar Profile:

<https://scholar.google.com/citations?user=9fHQ-3oAAAAJ&hl=en&oi=ao>

EDUCATION

Sep 2011- June 2014

Ph.D. (Computer Science)

Thesis Title: LINEAR REPRESENTATION LEARNING FOR VISUAL RECOGNITION

SUPERVISOR: Prof. Dr. Yi Zhang

(profile: www.machineilab.org/users/zhangyi/index.htm)

Direction : MACHINE INTELLIGENCE

College of Computer Science,

Sichuan University, Chengdu 610065 P.R. China.

www.scu.edu.cn/computer/

Sep 2006- June 2009

MASTER'S

Master of Engineering in Computer Application Technology

School of Computer and Communication,

HUNAN University, Changsha, Hunan P.R. China.

2002 – 2004

www-en.hnu.edu.cn/**Master of Computer Science** (16 Years)

Department of Computer Science,

COMSATS University Islamabad, Abbottabad Campus Pakistan.

www.cuiatd.edu.pk**PUBLICATIONS RECORD:**

#	Journal Publications: (included in the web of knowledge with JCR IF)	Impact Factor	Web-link
1	Jadoon Waqas , Yi Zhang Lei Zhang, Collaborative Neighbor Representation based Classification using l2-minimization Approach, <i>Pattern Recognition Letters</i> (ISSN: 0167-8655), Publisher: ELSEVIER SCIENCE BV, Vol. 34 No. 2. Pp.201–208, 2013.	2.81	https://doi.org/10.1016/j.patrec.2012.09.024
2	Jadoon Waqas , Yi Zhang, Lei Zhang, Graph Based Features Extraction via Datum Adaptive Weighted Collaborative Representation for Face Recognition, <i>International Journal of Pattern Recognition and Artificial Intelligence</i> (ISSN: 0218-0014), Publisher: WORLD SCIENTIFIC, Vol. 28 No. 2. Pp. 1451003-1-1451003-27, 2014.	1.11	https://doi.org/10.1142/S021801414510033
3	Waqas Jadoon , Lei Zhang, Yi Zhang, Extended collaborative neighbor representation for robust single-sample face recognition, <i>Neural Computing and Applications</i> (ISSN: 0941-0643), Publisher: Springer London, Vol. 26 No. 8. Pp. 1991-2000, 2015.	4.664	http://link.springer.com/article/10.1007/s00521-015-1843-x
4	Zhengjuan zhou, Jadoon Waqas , Intrinsic Structure based Feature Transform for image classification, <i>Journal of Visual Communication and Image Representation</i> (ISSN:1047-3203), Publisher: ELSEVIER SCIENCE BV, Vol. 38. PP 735–744, 2016	2.259	http://dx.doi.org/10.1016/j.jvcir.2016.04.016
5	Khan, Fiaz Gul, Bartolomeo Montrucchio, Bilal Jan, Abdul Nasir Khan, Waqas Jadoon , Shahaboddin Shamshirband, Anthony Theodore Chronopoulos, and Iftikhar Ahmed Khan, An optimized magnetostatic field solver on GPU using open computing language, <i>Concurrency and Computation: Practice and Experience</i> (ISSN: 1532-0626), Publisher: Wiley, Vol. 29 No. 5. Pp e3981, 2017	1.167	https://doi.org/10.1002/cpe.3981
6	Khan, Abdul Nasir, Mazhar Ali, Atta ur Rehman Khan, Fiaz Gul Khan, Iftikhar Ahmed Khan, Waqas Jadoon , Shahab Shamshirband, and Anthony T. Chronopoulos, A Comparative Study and Workload Distribution Model for Re-encryption Schemes in a Mobile Cloud Computing Environment, <i>International Journal of Communication Systems</i> (ISSN: 1074-5351) Publisher: WILEY, Vol. 30 No 16. Pp. e3308, 2017	1.278	https://doi.org/10.1002/dac.3308
7	Omer Iqbal, Waqas Jadoon , Zia ur Rehman, Fiaz Gul Khan, Babar Nazir, Iftikhar Ahmed Khan, Robust Face Recognition under Limited Training Sample Scenario using Linear Representation, <i>KSII</i>	0.711	http://doi.org/10.3837/tiis.2018.07.011

	<i>Transactions on Internet & Information Systems</i> , (ISSN: 1976-7277) Publisher: KSII-KOR SOC INTERNET INFORMATION, Vol. 12 No 7. Pp. 3172-3193, 2018		
8	Jadoon, Rab Nawaz, WuYang Zhou, Jawad Shafi, Iftikhar Ahmed Khan, and Waqas Jadoon , A Reliable Scheme for Synchronizing Multimedia Data Streams under Multicasting Environment, <i>Applied Sciences-Basel</i> , (ISSN: 2076-3417) Publisher: MDPI, Vol. 8 No.4. Pp. 556, 2018	2.217	https://doi.org/10.3390/app8040556
9	Rab Jadoon, WuYang Zhou, Waqas Jadoon , Iftikhar Ahmed Khan, RARZ: Ring-Zone Based Routing Protocol for Wireless Sensor Networks, <i>Applied Sciences-Basel</i> , (ISSN: 2076-3417) Publisher: MDPI, Vol. 8 No.7. Pp.1023, 2018	2.217	https://doi.org/10.3390/app8071023
10	Nawaz Jadoon, Rab, WuYang Zhou, Iftikhar Ahmed Khan, Muhammad Amir Khan, and Waqas Jadoon , EEHRT: Energy Efficient Technique for Handling Redundant Traffic in Zone-Based Routing for Wireless Sensor Networks, <i>Wireless Communications and Mobile Computing</i> , (ISSN: 1530-8669) Publisher: WILEY-HINDAWI, Vol. 2019. Pp. 7502140, 2019	1.396	https://doi.org/10.1155/2019/7502140
11	Qummar, Sehrish, Fiaz Gul Khan, Sajid Shah, Ahmad Khan, Shahaboddin Shamshirband, Zia Ur Rehman, Iftikhar Ahmed Khan, and Waqas Jadoon , A Deep Learning Ensemble Approach for Diabetic Retinopathy Detection, <i>IEEE Access</i> , (ISSN: 2169-3536) Publisher: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC, Vol. 7. Pp.150530-150539, 2019	4.098	https://doi.org/10.1109/ACCESS.2019.2947484
12	Rafeeq, Muhammad Jawad, Zia ur Rehman, Ahmad Khan, Iftikhar Ahmed Khan, and Waqas Jadoon , Ligature categorization based Nastaliq Urdu recognition using deep neural networks, <i>Computational and Mathematical Organization Theory</i> , (ISSN: 1381-298X) Publisher: SPRINGER, Vol. 25 No. 2. Pp.184–195, 2019	1.372	https://link.springer.com/article/10.1007/s10588-018-9271-y
13	Rab, Nawaz Jadoon, Waqas Jadoon , Ahmad Khan, Sajid Shah, Iftikhar Ahmed Khan, and WuYang Zhou, Linear Discriminative Learning for Image Classification, <i>Mathematical Problems in Engineering</i> , (ISSN: 1024-123X) Publisher: HINDAWI, Vol. 2019 Pp. 4760614, 2019	1.179	https://doi.org/10.1155/2019/4760614
14	Kalsoom, Aisha, Syed Sajid Hussain, Iftikhar Ahmed Khan, Babar Nazir, Waqas Jadoon , and Imran Ali Khan, Design and evaluation of a dynamic job search website for non-literate users of Pakistan, <i>New Review of Hypermedia and Multimedia</i> , (ISSN: 1361-4568) Publisher: Taylor & Francis, Pp. 1-27, 2019	0.867	https://doi.org/10.1080/13614568.2019.1694593
15	Awan, Adnan Anwar, Muhammad Amir Khan, Aqdas Naveed Malik, Syed Ayaz Ali Shah, Aamir Shahzad, Babar Nazir, Iftikhar Ahmed Khan, Waqas Jadoon , Naveed Shahzad, and Rab Nawaz Jadoon, Quality of service-based node relocation technique for mobile sensor networks, <i>Wireless Communications and Mobile Computing</i> , Vol. 2019. Pp. 5043187, 2019	1.396	https://doi.org/10.1155/2019/5043187

16	Usman Ali Khan, Iftikhar Ahmed Khan, Ahmad Din, Waqas Jadoon et al., Towards a Complete Set of Gym Exercises Detection Using Smartphone Sensors, <i>Scientific Programming</i> , (ISSN: 1058-9244) Publisher: HINDAWI, Article ID: 6471438, 2020.	0.963	https://doi.org/10.1155/2020/6471438
17	Shuchen Zhou, Waqas Jadoon , The partial computation offloading strategy based on game theory for multi-user in mobile edge computing environment, <i>Computer Networks</i> , (ISSN: 1389-1286) Publisher: Elsevier, Vol. 178, Pp. 107334, 2020	3.03	https://doi.org/10.1016/j.comnet.2020.107334
18	Khan IA, Iftikhar M, Hussain SS, Rehman A, Gul N, Jadoon W , Nazir B., Redesign and validation of a computer programming course using Inductive Teaching Method, <i>PLOS ONE</i> , (ISSN: 1932-6203) Vol.15(6), Pp. e0233716, Jun 2020.	2.870	https://doi.org/10.1371/journal.pone.0233716
19	Shuchen Zhou, Waqas Jadoon , Jointly Optimizing Offloading Decision and Bandwidth Allocation with Energy Constraint in Mobile Edge Computing Environment, <i>Computing</i> , Springer Vienna (ISSN: 436-5057) 103, no. 12 (2021): 2839-2865.	2.044	https://doi.org/10.1007/s00607-021-00931-z
20	Nasir, Maham, Waqas Jadoon , Iftikhar Ahmed Khan, Nosheen Gul, Sajid Shah, Mohammed ELAffendi, and Ammar Muthanna., Secure Reversible Data Hiding in Images Based on Linear Prediction and Bit-Plane Slicing, <i>Mathematics</i> , (ISSN: 2227-7390) 10, no. 18 (2022): 3311.	2.4	https://doi.org/10.3390/math10183311
21	Shafique, Sara, Iftikhar Ahmed Khan, Sajid Shah, Waqas Jadoon , Rab Nawaz Jadoon, and Mohammed ELAffendi., Towards Automatic Detection of Social Anxiety Disorder via Gaze Interaction, <i>Applied Sciences (Switzerland)</i> , (SSN: 2076-3417) 12, no. 23 (2022): 12298.	2.83	https://doi.org/10.3390/app122312298
22	Zhou, Shuchen, Waqas Jadoon , and Iftikhar Ahmed Khan, Computing Offloading Strategy in Mobile Edge Computing Environment: A Comparison between Adopted Frameworks, Challenges, and Future Directions, <i>Electronics (Switzerland)</i> , (ISSN: 2079-9292) 12, no. 11 (2023): 2452.	2.9	https://doi.org/10.3390/electronics12112452
23	Hussain, Ibrar, Iftikhar Ahmed Khan, Waqas Jadoon , Rab Nawaz Jadoon, Abdul Nasir Khan, and Muhammad Shafi., Touch or click friendly: Towards adaptive user interfaces for complex applications, <i>PLOS One</i> (ISSN: 1932-6203) 19, no. 2 (2024): e0297056.	3.7	https://doi.org/10.1371/journal.pone.0297056
24	Khan, Mehmood Ali, Iftikhar Ahmed Khan, Sajid Shah, EL-Affendi Mohammed, and Waqas Jadoon , Short-term wind power forecasting through stacked and bi directional LSTM techniques, <i>PeerJ Computer Science</i> 10 (2024): e1949.	2.6	https://peerj.com/articles/cs-1949/
25	Iqbal, Muhammad Ali, Waqas Jadoon , and Soo Kyun Kim, Synthetic Image Generation Using Conditional GAN-Provided Single-Sample	2.5	https://doi.org/10.3390/app14

	Face Image, <i>Applied Sciences</i> (Switzerland) 14, no. 12: 5049 (2024).		125049
	<u>Conference Publications:</u>		
	<ol style="list-style-type: none"> 1. Waqas Jadoon, Haixian Zhang “Locality Features Encoding in Regularized Linear Representation Learning for Face Recognition ,” IEEE conf. Frontiers of Information Technology (FIT), 2013. 2. Waqas Jadoon, Le Ken Lee, "Fault Tolerant Quality Aware Resource Scheduling Strategy in Computational Economy Based Grid Framework," IEEE FITME, International Seminar on Future Information Technology and Management Engineering, 2008. Pp.233-237. 3. M. H. Javid, W. Jadoon, H. Ali and M. D. Ali, "Design and Analysis of an Improved Deep Ensemble Learning Model for Melanoma Skin Cancer Classification," <i>2023 4th International Conference on Advancements in Computational Sciences (ICACS)</i>, Lahore, Pakistan, 2023, pp. 1-6, doi: 10.1109/ICACS55311.2023.10089716. 		

Teaching & Supervision

Teaching Services:

Duration: Spring 2021-Spring 2024 (3 years and 6 months)

Total number of Undergraduate courses taught: 12 courses (8 credit hours per semester, 6 lectures per week, 90 minutes per lecture)

Total number of Graduate courses taught: 3 courses.

Total: 15 courses (details attached in form)

Overall Student Feedback Of course Evaluation in % (using university official Portal): 78%

PhD Thesis

- 1. Game Theory-Based Multiuser Computation Offloading in Mobile Edge Computing (Completed)**
2. Deep Learning based Interpretable Framework for Simultaneous Segmentation of Retinal Multi-Lesions and Multi-Categorical Disease Grading (Registered).

Masters Thesis

Research Thesis Supervision:

3. Robust face image classification via collaborative representation framework under limited number of samples and partially noised conditions (Completed 2016)
4. Object Recognition Using Semi supervised Collaborative Representation Method (Completed 2017)
5. Subspace Clustering using Collaborative Representation Approach (Completed 2017)
6. Linear Collaborative representation learning approach for dimensionality reduction (Completed 2018)
7. Proactive Resource Allocation Approach for Runtime SLA Violation Monitoring, Detection and Explanation in Cloud (Completed 2018)
8. Deep convolutional Neural Network for Single Sample Face Recognition (Completed 2019)
9. Reversible Data Hiding Based on Linear Prediction and Bit-Plane Slicing (Completed 2019)
10. Comparison of Deep Convolutional Neural Networks using Transfer Learning: A Case of Writer Identification (completed)
11. Palmprint Recognition Based on Intrinsic Feature Learning (completed 2020)
12. Melanoma Skin Cancer Classification using Deep Ensemble Learning (completed 2021)
13. Ensembles of Multiple Models of CNN for Breast Cancer Classification with Boosting in Deep Learning (completed 2022)
14. Pakistan Sign Language Recognition Using Deep Learning (completed 2023)
15. Melanoma Skin cancer detection using Ensemble Approach (completed 2023)

**Undergraduate
Project Supervisions:**

- Automatic Meter Reading and Billing Generation
- Eye disease identification based on retina classification
- Visual metering
- Automatic attendance system based on Face Recognition
- Stamp verification system
- Group portal for collaboration
- Emergency alert
- Group photo
- IOT based gas water gasser controller

WORK EXPERIENCE

(April 2021-till to date)	Tenured Associate Professor (Department of Computer Science), COMSATS University Islamabad, Abbottabad Campus Pakistan
(July 2014-March 2021)	Assistant Professor, (Department of Computer Science), COMSATS University Islamabad, Abbottabad Campus Pakistan
(Sep 2011-June 2014)	Research Scholar (Machine Intelligence Lab, Department of Computer Science, Sichuan University China) PhD Research Scholar
(Jan 2010 – Jun. 2014)	Lecturer, (Department of Computer Science), COMSATS Institute of Information Technology, Pakistan. www.ciit-atd.edu.pk/departments/CS.aspx
(October 2007-July 2009)	Researcher Hunan University, Changsha P.R. China Research Project Title: Resource Management and Job Scheduling Strategy for Computational Grid in an Economic Based Grid Framework. Directions: Distributed and Grid systems particularly focusing on Fault tolerant job scheduling algorithms and large-scale peer-to-peer systems for content management
(August 2005-july 2006)	Research Associate, COMSATS Institute of Information Technology, Pakistan.

RESEARCH INTEREST

(Sep 2011-July 2014)	Ph.D. Research Scholar Machine Intelligence Lab. http://www.machineilab.org/ Sichuan University Chengdu P.R.China. Research Subject: Linear Representation Learning for Visual Recognition. Machine Learning Neural Networks Sparse Coding/Subspace learning Clustering and subspace segmentation using low-rank representation Multi-class classification/pattern recognition Deep learning for medical image processing
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Computational offloading in Mobile Edge Computing

AWARDS

- Higher Education Commission Approved PhD Supervisor
- Ministry of Education, Government of Pakistan scholarship for Master Studies at Hunan University China 2006.
- Chinese Government Scholarship for PhD studies at Sichuan University China 2011.
- IEEE Computational Intelligence Society Chengdu best student paper Award 2014.

ADDITIONAL SERVICES

Institutional

- Research and collaboration with Machine Intelligence Lab. School of Computer Science at Sichuan University China.
- Collaboration on research work at Software Competence Center Hagenberg GmbH Softwarepark 21, A-4232 Hagenberg, Austria.
- Participated in formulating the departmental policy/course content for online teaching.
- Helping and recommending MS and PhD students on various International Scholarship.
- Member of Departmental Academic Committee (DAC) for graduate studies.
- Member of Undergraduate project evaluation committee for BS (CS and SE).
- Domain head of QAC related to Digital Image Processing Courses
- Member Departmental Selection Board.
- Undergraduate class advisor for advising and motivating students related academic and personal issues
- Member of Departmental Accreditation Committee.
- Member Technical Program Committee (TPC) of FIT 2014,2015,2016,2017, 2018 and 2019
- Member program committee ICACS18 (International Conference on Advancements in Computational Sciences, University of Lahore, 2018.
- Serve as PhD External Evaluator at Capital University Islamabad.
- Served as MS External Evaluator at Gomal University DI Khan and University of Azad Jammu and Kashmir.

REFERENCES

Professor Dr. Yi Zhang (Ph.D. Supervisor)

Director, Machine Intelligence Lab.

Dean, College of Computer Science

Sichuan University, Chengdu 610065 P.R. China

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