

Dr. Muhammad Hassan Khan

Assistant Professor

Department of Computer Science,

University of the Punjab,

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Profile Summary

Research Publications:	36	Highest Qualification:	PhD (Germany)
Book:	1	Research Grants:	6
Journal:	21	Supervised Theses:	15 (MPhil)
Conference:	14	Publication Impact Factor:	71.72*
Citations:	427	[h-index, i10-index]:	[15, 14]

Education

Ph.D. Computer Science [Sep. 2018]

Universität Siegen, Siegen, Germany

Dissertation title: "Human Activity Analysis in visual Surveillance and Healthcare"

Advisor: Prof. Marcin Grzegorzec

M.Phil. Computer Science [Sep. 2010]

University of the Punjab, Lahore, Pakistan

Thesis title: "Some New Approached to Image Inpainting"

B.S. Information Technology [Sep. 2005]

BZ University, Multan, Pakistan

Research Interests

My current research interests include:

-Machine Learning -Pattern Recognition - Human Activity Analysis - Gait Biometrics
- Movement Analysis - Medical Image Processing - Image Quality Assessment

I have worked on image/video data to develop the algorithms for the classification of objects and human activities. In past, I have worked from software engineer to project manager; and experienced with variety of tools and technologies.

*Total publication impact factor calculated using the journal's latest impact factors.

Journal Publications

1. M.H. Khan, M.A. Javed, M.S. Farid, "Deep-Learning-based ConvLSTM and LRCN Networks for Human Activity Recognition ," *Electronics*, Apr. 2023 [IF: 2.69]
2. M. Usman, M. Ejaz, J.E. Nichol, M.S. Farid, S. Abbas, M.H. Khan, "A Comparison of Machine Learning Models for Mapping Tree Species Using WorldView-2 Imagery in the Agroforestry Landscape of West Africa," *ISPRS International Journal of Geo-Information*, Mar. 2023 [IF: 3.09]
3. M.H. Khan, M.S. Farid, M. Grzegorzec, "A comprehensive study on codebook-based feature fusion for gait recognition," *Information Fusion* , Dec. 2022 [IF: 17.56]
4. R. Mansoor, M.S. Farid, M.H. Khan, A. Maqsood, "A Layered Approach for Quality Assessment of DIBR-Synthesized Images," *Wireless Communications and Mobile Computing* , Nov. 2021 [IF: 2.41]
5. M.H. Khan, M.S. Farid, M. Grzegorzec, "Vision-based Approaches Towards Person Identification using Gait," *Computer Science Review*, Sep. 2021 [IF: 8.75]
6. T. Haider, M.S. Farid, R. Mahmood, A. Ilyas, M.H. Khan, S.T.A. Haider, M.H. Chaudhry, M. Gul, "A Computer Vision-based Approach for Nitrogen Content Estimation in Plant Leaves," *Agriculture*, August. 2021 [IF: 2.925]
7. F. Amjad, M.H. Khan, M.A. Nisar, M.S. Farid, M. Grzegorzec, "A Comparative Study of Feature Selection Approaches for Human Activity Recognition using Multimodal Sensory Data," *Sensors*, vol. 21, Mar. 2021 [IF: 3.576]
8. H.M.U.H. Alvi, M.S. Farid, M.H. Khan, M. Grzegorzec, "Quality assessment of 3D synthesized images based on textural and structural distortion estimation," *Applied Sciences*, vol. 11, no. 6, article 2666, Mar. 2021 [IF: 2.679]
9. A. Maqsood, M.S. Farid, M.H. Khan, M. Grzegorzec, "Deep Malaria Parasite Detection in Thin Blood Smear Microscopic Images," *Applied Sciences*, vol. 11, no. 5, article 2284, Mar. 2021 [IF: 2.679]
10. A. Ilyas, M.S. Farid, M.H. Khan, M. Grzegorzec, "Exploiting Superpixels for Multi-Focus Image Fusion," *Entropy*, vol. 23, no. 2, article 247, Feb. 2021 [IF: 2.524]
11. R. Zafar, M.S. Farid, M.H. Khan, "Multi-focus Image Fusion: Algorithms, Evaluation, and a Library," *Journal of Imaging*, vol. 6, no. 7, article 60, July 2020 [HEC - X Category]
12. M.H. Khan, M. Zöller, M.S. Farid, M. Grzegorzec, "Marker-Based Movement Analysis of Human Body Parts in Therapeutic Procedure," *Sensors*, vol. 20, no. 11, 3312, May 2020 [IF: 3.576]
13. M.H. Khan, M.S. Farid, M. Grzegorzec, "A non-linear view transformations model for cross-view gait recognition," *Neurocomputing*, vol. 402, pp. 100–111, Apr. 2020 [IF: 5.719]
14. N. Khehrah, M.S. Farid, S. Bilal, M.H. Khan, "Lung nodule detection in CT images using statistical and shape-based features," *Journal of Imaging*, vol. 6, no. 2, article 6, Feb. 2020 [HEC - X Category]

15. M. Saleem, M.S. Farid, S. Saleem, M.H. Khan, “X-ray image analysis for automated knee osteoarthritis detection,” *Signal, Image and Video Processing*, vol. 14, Issue 6, pp. 1079–1087, Feb. 2020 [IF: 2.157]
16. M.H. Khan, M.S. Farid, M. Grzegorzec, “A Generic Codebook based Approach for Gait Recognition,” *Multimedia Tools and Applications*, vol. 74, Issue 24, pp. 35689–35712, Jul. 2019 [IF: 2.757]
17. S.A.H. Tabatabaei, A. Delforouzi, M.H. Khan, T. Wesener, M. Grzegorzec, “Automatic Detection of the Cracks on the Concrete Railway Sleepers,” *International Journal of Pattern Recognition and Artificial Intelligence*, vol. 33, no. 9, Mar. 2019 [IF: 1.375]
18. M.H. Khan, M.S. Farid, M. Grzegorzec, “Spatiotemporal features of human motion for gait recognition,” *Signal, Image and Video Processing*, vol. 13, Issue 2, pp. 369–377, Sep. 2018 [IF: 2.157]
19. M.H. Khan, M. Schneider, M.S. Farid, M. Grzegorzec, “Detection of infantile movement disorders in video data using deformable part-based model,” *Sensors*, vol. 18, no. 10, pp. 3202, Sep. 2018 [IF: 3.576]
20. M.H. Khan, J. Helsper, M.S. Farid, M. Grzegorzec, “A computer vision-based system for monitoring vojta therapy,” *International Journal of Medical Informatics*, vol. 113, pp. 85–95, Feb. 2018 [IF: 4.046]
21. M.H. Khan, M. Grzegorzec, “A Vision-Based Framework to Recognize the Movement Patterns,” *International Journal of Software Innovation*, vol. 5, pp. 18–32, Jul. 2017 [HEC - Y Category]

Books/Book Chapters

22. M.H. Khan, *Human Activity Analysis in visual Surveillance and Healthcare*, 2018, Logos Verlag Berlin GmbH
23. O. Tiebe, C. Yang, M.H. Khan, M. Grzegorzec, and D. Scarpin, “Stripes-Based Object Matching,” in *Computer and Information Science*, pp. 59–72, Jun. 2016, Springer

Conference Publications

24. U.B. Muslim, M.H. Khan, M.S. Farid, “Exploiting Spatiotemporal Features for Action Recognition,” accepted in *Proc. IEEE International Bhurban Conference on Applied Sciences & Technology (IBCAST)*, Islamabad, Pakistan, pp. , 12-16 Jan. 2021
25. M.H. Khan, M.S. Farid, M. Zahoor, M. Grzegorzec, “Cross-view Gait Recognition using Non-linear View Transformations of Spatiotemporal Features,” in *Proc. IEEE International Conference on Image Processing (ICIP)*, Athens, Greece, pp. 773–777, 7-10 Oct. 2018
26. M.H. Khan, M.S. Farid, M. Grzegorzec, “Using a Generic Model for Codebook-based Gait Recognition Algorithms,” in *Proc. 6th IAPR/IEEE International Workshop on Biometrics and Forensics*, Sassari, Italy, pp. 1–7, 7-8 June 2018

27. M.H. Khan, M.S. Farid, M. Grzegorzek, "Person Identification using Spatiotemporal Motion Characteristics," in *Proc. 2017 IEEE International Conference on Image Processing (ICIP)*, Beijing, China, pp. 166–170, 17-20 Sept. 2017
28. A. Delforouzi, S.A.H. Tabatabaei, M.H. Khan, M. Grzegorzek, "A Vision-Based Method for Automatic Crack Detection in Railway Sleepers," in *Proc. of the 10th International Conference on Computer Recognition Systems (CORES)*, pp. 73–82, May 2017
29. M.S. Farid, M. Lucenteforte, M.H. Khan, M. Grangetto, "Semi-automatic Segmentation of Scattered and Distributed Objects," in *Kurzynski M., Wozniak M., Burduk R. (eds) Proceedings of the 10th International Conference on Computer Recognition Systems (CORES) 2017. Advances in Intelligent Systems and Computing*, vol 578. Chapter 12, pp. 110-119, 22-24 May 2017, Polanica Zdroj, Poland, Springer, Cham, ISBN=978-3-319-59162-9
30. M.H Khan, F. Li, M.S. Farid, M. Grzegorzek, "Gait Recognition using Motion Trajectory Analysis," in *Kurzynski M., Wozniak M., Burduk R. (eds) Proceedings of the 10th International Conference on Computer Recognition Systems (CORES) 2017. Advances in Intelligent Systems and Computing*, vol 578. Chapter 8, pp. 73–82, 22-24 May 2017, Polanica Zdroj, Poland, Springer, Cham, ISBN=978-3-319-59162-9
31. M.H. Khan, J. Helsper, Z. Boukhers, M. Grzegorzek, "Automatic recognition of movement patterns in the vojta therapy using RGB-D data," in *Proc. 23rd IEEE International Conference on Image Processing (ICIP)*, pp. 1235–1239, Sep. 2016
32. M.H. Khan, K. Shirahama, M.S. Farid, M. Grzegorzek, "Multiple Human Detection in Depth Images," in *Proc. Multimedia Signal Processing (MMSP), 2016 IEEE 18th International Workshop on*, Montreal, QC, Canada, pp. 1–6, 21-23 Sept. 2016
33. M.H. Khan, J. Helsper, C. Yang, M. Grzegorzek, "An automatic vision-based monitoring system for accurate Vojta therapy," in *Proc. 15th IEEE International Conference on Computer Information Science (ICIS)*, pp. 1–6, Jun. 2016
34. M.S. Farid, H. Khan, A. Mahmood, "Image Inpainting using Cubic Hermit Spline," in *Proc. SPIE 8285, International Conference on Graphic and Image Processing (ICGIP 2011)*, Cairo, Egypt, 82854R, 1-3 October 2011
35. M.S. Farid, H. Khan, A. Mahmood, "Image Inpainting based on Pyramids," in *Proc. Signal Processing (ICSP), 2010 IEEE 10th International Conference on*, Beijing, China, pp. 711–715, 24-28 Oct. 2010
36. M.S. Farid, H. Khan, "Image Inpainting using Dynamic Weighted Kernels," in *Proc. Computer Science and Information Technology (ICCSIT), 2010 3rd IEEE International Conference on*, Chengdu, China, pp. 252–255, 9-11 July 2010

Research Projects

1. [Mar. 2017 – Dec. 2018] - "Development and Optimization of Android Smartphone Imaginary Application for Real-time Nitrogen Management in Wheat, Rice and Maize Crops"
 Funding agency: Punjab Agricultural Research Board, Pakistan
 Grant No.: PARB/21-140/2091
 Status: Project initialized.

2. [Mar. 2017 – Dec. 2018] - “HumCare: Human Activity Analysis in Healthcare”
 Funding agency: Higher Education Commission (HEC) Pakistan
 Grant No.: 20-15041/NRPU/R&D/HEC/2021
 Status: Project initialized.
3. [Sep. 2021 – Jun. 2022] - “Number Plate Detection and Recognition”
 Funding agency: Ignite National Technology Fund, Pakistan
 Grant No.: NGIRI-2022-11599
 Status: Successfully completed, and the results are submitted in impact factor journals.
4. [Mar. 2017 – Dec. 2018] - “SenseVojta: Sensor-based Diagnosis, Therapy and Aftercare According to the Vojta Principle”
 Funding agency: The German Federal Ministry of Education and Research (BMBF)
 Grant No.: 13GW0166E
 Status: Successfully completed, and the results are published in impact factor journals.
5. [Nov. 2015 – Feb. 2017] - “Sensor-based Quality Inspection of Railway Sleepers”
 Funding agency: The German Federal Ministry of Economics and Technology (BMWi)
 Grant No.: KF3411802GR4
 Status: Successfully completed, and the results are published in impact factor journals.
6. [Sep. 2008 – Jan. 2011] - “Integration of Open Source Software Projects in IT Education”
 Funding agency: The National ICT R&D, Pakistan
 Grant No.: 96
 Status: Successfully completed, and a complete opens source ERP is customized in University of the Punjab, Pakistan.

Research Grants

1. [2022–2025] - “HumCare: Human Activity Analysis in Healthcare”
 Funding agency: Higher Education Commission (HEC) Pakistan
 Grant: Rs. 11.13 Million. This is the highest research grant in the University of Punjab from HEC NRPU till to date.
 Status: In Progress.
2. [2021–2022] - “Number Plate Detection and Recognition”
 Funding agency: Ignite National Technology Fund, Pakistan
 Grant: Rs. 80K.
 Status: Successfully completed, and the results are submitted in an impact factor journal.
3. [2021–2022] - “Feedback-based Adaptive Human Activity Recognition”
 Funding agency: University of the Punjab, Lahore, Pakistan
 Grant: Rs. 200K
 Status: Successfully completed, and the results are published in an impact factor journal.
4. [2019–2020] - “Multimodal Sensor Data Analysis for Human Activity Recognition”
 Funding agency: University of the Punjab, Lahore, Pakistan
 Grant: Rs. 150K
 Status: Successfully completed, and the results are published in an impact factor journal.

5. [2013–2014] - “Infrastructure of iPhone and Android Development at Agile Technologies (An indigenous software house of PUCIT)”
 - Funding agency: University of the Punjab, Lahore, Pakistan
 - Grant: Rs. 150K
 - Status: Successfully completed, and the development infrastructure was setup in the Punjab University College of Information Technology.
6. [2011–2012] - “A Hierarchical Approach to Image De-fencing”
 - Funding agency: University of the Punjab, Lahore, Pakistan
 - Grant: Rs. 125K
 - Status: Successfully completed, and the results are published in renowned international proceedings.

Seminars/Conferences/Workshops Attended

- [Jan. 2021] 18th IEEE International Bhurban Conference on Applied Sciences and Technology (IBCAST).
- [Jan. 2021] Webinar:-Dissecting the scholarly publishing process. An overview and guidance on publishing.
- [Dec. 2019] Seminar:- Peace Promotion Activities at PU, Lahore, Pakistan.
- [Dec. 2018] MedDS@IMI Seminar, Universität zu Lübeck, Lübeck, Germany.
- [Oct. 2018] 25th IEEE International Conference on Image Processing (ICIP), Athens, Greece.
- [Dec. 2018] 6th International Workshop on Biometrics and Forensics (IWBF), Sassari, Italy.
- [Feb. 2018] Seminar:- H2020-MyAHA, Universität Siegen, Siegen, Germany.
- [Nov. 2017] Seminar:- Machine Learning in Neuroimaging, Universität Siegen, Siegen, Germany.
- [Jul. 2017] Seminar:- Cognitive Activity Recognition, Universität Siegen, Siegen, Germany.
- [May. 2017] International conference on computer recognition systems, Zdrój, Poland.
- [Apr. 2017] ERASMUS+ Mobility for Teaching (7th International Week Internet Communication Management), Katowice, Poland.
- [Sep. 2016] 18th IEEE International Workshop on Multimedia Signal Processing (MMSP), Montreal, Canada.
- [Jun. 2016] 15th IEEE/ACIS International Conference on Computer and Information Science (ICIS), Okayama, Japan.
- [Apr. 2011] Computer Project Exhibition and Competition (COMPPEC) 2011, Islamabad, Pakistan.
- [Jun. 2010] 10th IEEE International Conference on Signal Processing (ICSP 2010), Beijing, China.
- [Jun. 1996] Boy’s Scouts Summer Training Camp, Murree, Pakistan.

International Teaching

- [Fall 2018]
 Course: Medical Image Processing
 Degree Program: MS
 Place: Universität Siegen, Siegen, Germany.
- [Summer 2017]
 Course: Pattern Recognition
 Degree Program: BS and MS (within the framework of Erasmus+ program)
 Place: University of Economics in Katowice, Katowice, Poland.
- [Summer 2016]
 Course: Pattern Recognition
 Degree Program: MS
 Place: University of Economics in Katowice, Katowice, Poland.

Honors

- Second position in M. Phil Computer Science, University of the Punjab, Lahore, Pakistan.
- First position in F.Sc at District Bahawalnagar, Pakistan.
- Merit scholarships in BS.

Awards/Recognitions

- [Oct. 2021] Research Incentive Award of Rs. 54K from University of the Punjab, Lahore, Pakistan for the year of 2020.
- [Dec. 2020] Research Incentive Award of Rs. 25K from University of the Punjab, Lahore, Pakistan for the year of 2019.
- [Apr. 2020] Research Incentive Award of Rs. 40K from University of the Punjab, Lahore, Pakistan for the year of 2018.
- [Oct. 2021] Performance Evaluation Award of Rs. 40.5K from University of the Punjab, Lahore, Pakistan for the year of 2019.
- [Jul. 2021] Performance Evaluation Award of Rs. 35K from University of the Punjab, Lahore, Pakistan for the year of 2018.
- Best paper award for "A Vision-Based Method for Automatic Crack Detection in Railway Sleepers" at CORES 2017.
- [Nov. 2014] Scholarship for PhD study at Universität Siegen, Germany (Jan. 2015 - Dec. 2018) from University of the Punjab, Lahore, Pakistan.
- [Sep. 2010] Travel Grant of Rs. 190K from Higher Education Commission, Pakistan to present my research paper at ICSP'10, China.
- [Aug. 2009] Development and deployment of an integrated ERP solution for Punjab University College of Information Technology, University of the Punjab. Lahore, Pakistan.

Formal Training / Tests

- Pattern Recognition: 1.0 (Very Good)
- German (A1.1): 2.0

- NTS GAT (General): 84.23
- Boys Scouts Summer Training Camp (1996)

Employment, University of the Punjab, Pakistan.

Assistant Professor *Nov. 2014 to present*
 Courses: Pattern Recognition, Advance Web GIS, Web Engineering, Programming Fundamentals

Lecturer *Sep. 2007 - Nov. 2014*
 Courses: Programming Fundamentals, Object Oriented Programming, Web Development, Internet Programming, Enterprise Application Development

Head of Agile Technologies *Sep. 2007 - Dec. 2014*
 Activities: Leading a team for the automation of university systems. We developed and deployed a complete ERP system to fulfill the academics and administrative requirements of the university.

Employment, University of Management and Technology, Pakistan.

Software Engineer *Mar. 2006 - Aug. 2007*
 Worked as Software Engineer to develop and provide the support of various automated solutions to the university. In particular, I developed/customized a complete Campus Management System for the faculty, staff and students.

Service to the Community

- Technical reviewer of several journals including:
 - IEEE Transaction on Cybernetics
 - IEEE Transactions on Circuits and Systems for Video Technology
 - Neurocomputing
 - Artificial Intelligence in Medicine
 - Computerized Medical Imaging and Graphics
 - Innovation and Research in BioMedical engineering
 - Multimedia Tools and Applications
 - Sensors
 - Applied Sciences
 - Healthcare
 - Entropy
 - Mathematics
 - Robotics
 - Mathematical Problem in Engineering
 - ACM Multimedia Conference
- [Oct. 2022] Served as Subject Specialist at Federal Public Service Commission, Pakistan.
- [Sep. 2022] Served as Judge in Science Fair, Fazaia Intermediate College Lahore Cantt, Lahore.
- [Aug. 2022 - To Date] M.Phil/Ph.D External Examiner at Virtual University of Pakistan.
- Member Program Committee at International Conference on Time Series and Forecasting (ITISE2022)

- [2022 - To Date] Member of the College Committee for the accreditation of bachelor level computing degree programs from the National Computing Education Accreditation Council (NCEAC).
- [2022 - To Date] Member of the Disciplinary Committee at Faculty of Computing and Information Technology, University of the Punjab, Lahore.
- [2021 - To Date] Member of the the Departmental Doctoral Program Committee (DDPC), University of the Punjab, Lahore.
- [2019 - 2020] Member of PUCIT Financial Aid Committee for the allocation of financial aid to students.
- [De. 2012] Served as Judge in Punjab Science Fairs, Govt. Central Model School for Boys, Lahore.
- [2008 - 2014] Served as an administrator of PUCIT Campus Management System, online admissions, and a member of several admission committees in the college.
- [2010 - 2011] Member of the College Disciplinary Committee at Punjab University College of Information Technology, University of the Punjab, Lahore.
- [2010 - 2011] Member of the College Committee for the accreditation of bachelor level computing degree programs from the National Computing Education Accreditation Council (NCEAC).
- Supervised BS Projects: 59

Research Thesis Supervised

- [PhD Thesis] Mr. Husnain Haider, University of the Punjab, Pakistan. In Progress
Multimodel Sensory Data Analysis and Fusion Techniques for Healthcare
- [PhD Thesis] Ms. Tazeem Haider, University of the Punjab, Pakistan. In Progress
Ontology based Human Activity Recognition using sensory data
- [M. Phil/MS Thesis] Ms. Qudsia Hamid, University of the Punjab, Pakistan. May, 2013.
3D Spatial Parcel Registration
- [M. Phil/MS Thesis] Mr. Daniel Novakovic, University of Siegen, Germany. Dec, 2017.
Cross-view gait recognition
- [M. Phil/MS Thesis] Mr. Venkata Sai Jaswanth Kumar Boddu, University of Siegen, Germany. Jul, 2018.
Implementation of an Automatic Tool for Fall Detection in Elderly People
- [M. Phil/MS Thesis] Ms. Maryiam Zahoor, University of the Punjab, Pakistan. Oct, 2018.
Multiview gait recognition using spatiotemporal motion characteristics
- [M. Phil/MS Thesis] Mr. Usairam Bin Muslim, University of the Punjab, Pakistan. May, 2020.
Exploiting Spatiotemporal Features for Action Recognition
- [M. Phil/MS Thesis] Ms. Nawal Gul Bahar, University of the Punjab, Pakistan. Feb, 2021.
A GIS based Classification of Biodiversity using Remote Sensing
- [M. Phil/MS Thesis] Ms. Fatima Amjad, University of the Punjab, Pakistan. Mar, 2021.
A Feature Selecting Technique on Multimodels Sensoric Data for Human Activity Analysis
- [M. Phil/MS Thesis] Mr. Mohsin Nazir, University of the Punjab, Pakistan. Mar, 2021.
Feedback-based Adaptive Human Activity Recognition System

- [M. Phil/MS Thesis] Ms. Mehak Hanif, University of the Punjab, Pakistan. In Progress
Impact Assesment of soil and groundwater quality on crop water consumption for improved irrigation
- [M. Phil/MS Thesis] Ms. Rimsha Fatima, University of the Punjab, Pakistan. Sep, 2022.
Feature Learning-based Approaches Towards Recognition of Walking Styles using IMU's Data
- [M. Phil/MS Thesis] Ms. Tania Arshad, University of the Punjab, Pakistan. Sep, 2022.
Deep Fake Detections
- [M. Phil/MS Thesis] Ms. Hiba Azam, University of the Punjab, Pakistan. Sep, 2022.
Multi-Gait Recognition using Spatiotemporal Features of Human Motion
- [M. Phil/MS Thesis] Ms. Aneesa Amjad, University of the Punjab, Pakistan. Sep, 2022.
Soccer video analytics and commentary generation
- [M. Phil/MS Thesis] Mr. Muhammad Ahtisham, University of the Punjab, Pakistan. Sep, 2022.
A comparative study of deep learning models for human action recognition
- [M. Phil/MS Thesis] Ms. Mahnoor Ejaz, University of the Punjab, Pakistan. Sep, 2022.
Tree Detection and Classification in Multispectral Data
- [M. Phil/MS Thesis] Ms. Marriam Aslam, University of the Punjab, Pakistan. Sep, 2022.
Applications of Optical Coherence Tomography in Diagnosis of Diabetic Retinopathy, Age Related Maculopathy Degeneration, and Glaucoma
- [BS Thesis] Mr. Julien Frederic Helsper, University of Siegen, Germany. Jan, 2016.
Automatic Recognition of Movement Patterns in the Vojta-Therapy using RGB-D Data
- [BS Thesis] Mr. Manuel Schneider, University of Siegen, Germany. Oct, 2017.
Automatic Pose Recognition in Vojta-therapy
- [BS Thesis] Mr. Martin Zoller, University of Siegen, Germany. Aug, 2018.
A Comparative Study of 3D Pose Estimation for Patients in Physiotherapy
- [BS Thesis] Ms. Jawayria Hashmi et al., University of the Punjab, Pakistan. Jun, 2020.
Real-time Obstacle Detection and Navigation System for the Visually Impaired Community
- [BS Thesis] Mr. Abdullah Zafar et al., University of the Punjab, Pakistan. Jun, 2020.
A Comparative Study of Malware Classification using Machine Learning Techniques
- [BS Thesis] Ms. Kainat Sadaqat, University of the Punjab, Pakistan. Jun, 2021.
Multi-gait Recognition
- [BS Thesis] Mr. Eman Ejaz, University of the Punjab, Pakistan. Jun, 2021.
We-Go - Intelligent Tourism Recommendation System
- [BS Thesis] Ms. Nasira Jamil, University of the Punjab, Pakistan. Jun, 2021.
Artificially Intelligent E-shopping system
- [BS Thesis] Mr. Muhammad Tajeel Zia, University of the Punjab, Pakistan. Jun, 2021.
Virtual Reality (VR) Shopping App
- [BS Thesis] Mr. Muhammad Ali et al., University of the Punjab, Pakistan. Jun, 2022.
Automatic Car Parking System
- [BS Thesis] Ms. Farwa Farzand, University of the Punjab, Pakistan. Jun, 2022.
Gait Recognition for Multiple People

Memberships

- Member, IEEE [2016 – to-date]
- Member, IACSIT [2014 – to-date]
- Member, IAENG [2014 – to-date]

Languages

- English
- Urdu (National Language)
- Punjabi (Native Language)
- German (A1.1)


Countries Visited

China, Germany, Japan, Canada, Austria, Czech Republic, Slovakia, Hungary, Poland, Kingdom of Saudi Arabia, Belgium, Netherlands, France, Switzerland, United Kingdom, Italy, Greece, Spain

References

- Prof. Dr.-Ing. habil. Marcin Grzegorzek
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- Prof. Dr. Frank Deinzer
University of Applied Sciences, Würzburg 97070 Bavaria, Germany.
Email: frank.deinzer@fhws.de

Research IDs & Profiles

 <https://scholar.google.com/citations?user=i9YHH6oAAAAJ&hl=en>

 <https://www.researchgate.net/profile/Muhammad-Khan-840>

 <https://orcid.org/0000-0002-6145-5848>

 <https://publons.com/researcher/4230030/muhammad-hassan-khan/>