**Dr. Ali Haider Khan**
Sr. Member IEEE (99833465)
(HEC Approved PhD Supervisor)
**CURRENT JOB:** POST DOCTORAL RESEARCH FELLOW
**CURRENT ORGANIZATION:** BEIJING UNIVERSITY OF TECHNOLOGY, BEIJING, CHINA
**D.O.B:** 04 SEPTEMBER 1990 **NATIONALITY:** PAKISTAN
**CONTACT NUMBER:** +86-15600301600 (China), +92-333-6135130 (Pakistan)
**EMAIL:** ALI.KHAN@BJUT.EDU.CN , AH.JISKANI@GMAIL.COM

## EDUCATIONAL SUMMARY:

1. **Post Doctoral Research Fellow** **[September 2024 – Present]**
   **Beijing University of Technology, Beijing, China**
   Area: Medical Image Analysis Using Deep Neural Network
   ***Major / Specialization:*** *Deep Learning, Artificial Intelligence*

2. **PhD Computer Science** **[2018 – 2023]**
   **University of Management & Technology, Lahore, Pakistan**
   Thesis: Cardiac Disorder Classification by Electrocardiogram Sensing Using Deep Neural Network
   **Marks:** CGPA: 3.62/ 4, (Gold Medalist)
   ***Major / Specialization:*** *Deep Learning, Artificial Intelligence*

3. **Master of Science/ M.Phil** **[2013 – 2016]**
   **COMSATS Institute of Information Technology, Islamabad, Pakistan**
   **Marks:** CGPA: 3.66/ 4
   ***Major / Specialization:*** *Software Engineering*

4. **BS Computer Science** **[2008 – 2012]**
   **Bahauddin Zakariya University, Multan, Pakistan**
   **Marks:** CGPA: 3.14/ 4
   ***Major / Specialization:*** *Computer Science*

5. **ICS (Computer Science) equivalent to A levels** **[2006 – 2008]**
   **Central College Multan, Pakistan**

6. **Secondary School Certificates (SSC) equivalent to O levels** **[2005 – 2006]**
   **Millat Public School Multan, Pakistan**

## EMPLOYMENT EXPERIENCE:

1. **Post Doctoral Research Fellow in Artificial Intelligence** **September 30, 2024 – Present**
   College of Computer Science
   **Beijing University of Technology, Beijing, China**

2. **Assistant Professor Computer Science** **March 15, 2023 – August 30, 2024**
   Department of Software Engineering, Faculty of Computer Science
   **Lahore Garrison University, Lahore, Pakistan**

3. **Lecturer Computer Science** **October 02, 2020 – March 14, 2023**
   Department of Computer Science
   **KAIMS International Institute, Multan, Pakistan**

4. **Lecturer Computer Science** **November 2017 – September 2020**
   Department of Computer Science & Information Technology
   **National College of Business Administration & Economics, Multan, Pakistan**

5. **Lecturer Computer Science** **August 22, 2016 – September 27,2017**
   Department of Computer Science
   **Bahria Model College & University, Islamabad, Pakistan**

6. **Sr. System Engineer** **February 04, 2013 – February 03, 2016**
   Network Communication & Information Security
   **National Database and Registration Authority (NADRA), Multan, Pakistan**

## PROFESSIONAL TRAINING:

**Outcome Based Education (OBE) Training** **September 2023**
National Computing Education Accreditation Council (NCEAC), at Lahore Garrison University, Lahore, Pakistan.

**Amazon SageMaker** **August 2023**
Research Center of Computing & Biomedical Informatics
Lahore, Pakistan.

**Data Science in Practice** **November 23, 2018 to November 27, 2018**
Higher Education Commission & Data Science Initiative Team, at SZABIST University, Islamabad, Islamabad, Pakistan.

**Information Security in Transactional System** **February 2016**
National Database and Registration Authority (NADRA), HQ, Islamabad, Pakistan
Islamabad, Pakistan.

## RESEARCH PUBLICATIONS:

### Journal Papers:

1. **Khan, A.H.** (2025). LGD_Net: Capsule network with extreme learning machine for classification of lung diseases using CT scans **PloS One**, 20(8): e0327419.
   **IF** 2.9, **WOS Category:** Q1 **HEC Category: W**
2. **Khan, A.H.** (2025). A new approach of anomaly detection in shopping center surveillance videos for theft prevention based on RLCNN model. **PeerJ Computer Science**, 11, e2944.
   **IF** 3.8, **WOS Category:** Q1 **HEC Category:** W
3. **Khan, A.H.** (2025). A hybrid steganography framework using DCT and GAN for secure data communication in the big data era. **Scientific Reports**, 15(1), 19630.
   **IF** 3.8, **WOS Category:** Q1 **HEC Category:** W
4. **Khan, A.H.**, (2025). Leveraging two-dimensional pre-trained vision transformers for three-dimensional model generation via masked autoencoders. **Scientific Reports**, 15(1), 3164.
   **IF** 3.8, **WOS Category:** Q1 **HEC Category: W**
5. **Khan, A. H.,** (2025). Next-generation diabetes diagnosis and personalized diet-activity management: A hybrid ensemble paradigm. **PloS One**, 20(1), e0307718.
   **IF** 2.9, **WOS Category:** Q1 **HEC Category: W**
6. **Khan, A. H.,** (2025). Enhancing Melanoma Diagnostic: Harnessing the Synergy of AI and CNNs for Groundbreaking Advances in Early Melanoma Detection and Treatment Strategies. **International Journal of Imaging Systems and Technology**, 35(1), e70016.
   **IF** 3.3, **WOS Category:** Q2 **HEC Category: W**
7. **Khan, A. H.,** (2024). Deep Image Synthesis, Analysis and Indexing using Integrated CNN Architectures. **IEEE Access**.
   **IF** 3.4, **WOS Category:** Q1 **HEC Category: W**
8. **Khan, A. H.,** (2024). Enhancing intrusion detection: a hybrid machine and deep learning approach. **Journal of Cloud Computing**, 13(1), 123.
   **IF** 3.7, **WOS Category:** Q2 **HEC Category: W**
9. **Khan, A. H.,** (2024). PDCNET: Deep Convolutional Neural Network for Classification of Periodontal Disease using Dental Radiographs. **IEEE Access**.
   **IF** 3.4, **WOS Category:** Q1 **HEC Category: W**
10. **Khan, A. H.,** (2024). A gene selection algorithm for microarray cancer classification using an improved particle swarm optimization. **Scientific Reports**, 14(1), 19613.
    **IF** 3.8, **WOS Category:** Q1 **HEC Category: W**
11. **Khan, A. H.,** (2024). Deep learning for lungs cancer detection: a review. **Artificial Intelligence**

## RESEARCH PUBLICATIONS:

### Journal Papers:

**Review**, 57(8), 197.
**IF** 10.7, **WOS Category:** Q1 **HEC Category: W**

12. **Khan, A. H.,** (2024). Advanced CKD detection through optimized metaheuristic modeling in healthcare informatics. **Scientific Reports**, 14(1), 12601.
**IF** 3.8, **WOS Category:** Q1 **HEC Category: W**
13. **Khan, A. H.,** (2024). IoMT-Based Healthcare Systems: A Review. **Computer Systems Science & Engineering**, 48(4).
**IF** 2.69, **WOS Category:** Q3 **HEC Category: X**
14. **Khan, A. H., (2023).** Deep Learning with a Novel Concoction Loss Function for Identification of Ophthalmic Disease, **Computers, Materials & Continua**,
**IF** 2.96, **WOS Category:** Q2 **HEC Category: X**
15. **Khan, A. H.,** (2023). Spatial Correlation Module for Classification of Multi-Label Ocular Diseases Using Color Fundus Images. **Computers, Materials & Continua**, 76(1).
**IF** 2.96.14, **WOS Category:** Q2 **HEC Category: X**
16. Khan, A. H., (2023). A Systematic Analysis for the Detection of Skin Disease Using Deep Learning Methodologies. Journal of Computing & Biomedical Informatics, 4(02), 66-75.
**HEC Category: Y**
17. Khan, A. H., (2023). Predicting the Metastasis Ability of Prostate Cancer using Machine Learning Classifiers. Journal of Computing & Biomedical Informatics, 4(02), 1-7.
**HEC Category: Y**
18. **Khan, A. H.,** (2022). Neural Network-Based Prediction of Potential Ribonucleic Acid Aptamers to Target Protein. Journal of Computing & Biomedical Informatics, 4(01), 21-36.
**HEC Category: Y**
19. **Khan, A. H.** (2022). A Systematic Analysis for Cardiovascular Disease Classification Using Deep Learning. Journal of Computing & Biomedical Informatics, 3(02), 32-41.
**HEC Category: Y**
20. **Khan, A. H.,** (2022). Feature extraction of plantleaf using deep learning. Complexity, 2022.
**IF** 2.88 **WOS Category:** Q1 **HEC Category: W**
21. **Khan, A. H.** (2022). Deep Learning Techniques for Diagnosis of Lungs Cancer. Journal of Computing & Biomedical Informatics, 3(01), 230-242.
**HEC Category: Y**
22. **Khan, A. H.,** (2022). Deep Learning Based Classification of Wrist Cracks from X-ray Imaging. CMC-COMPUTERS MATERIALS & CONTINUA, 73(1), 1827-1844.
**IF** 3.14, **WOS Category:** Q1 **HEC Category: W**
23. Khan, A. H., (2021). Arrhythmia Classification Techniques Using Deep Neural Network. Complexity, 2021
**IF** 2.66, **WOS Category:** Q1 **HEC Category: W**
24. Khan, A. H., (2021). Cardiac disorder classification by electrocardiogram sensing using deep neural network. Complexity, 2021.
**IF** 2.66, **WOS Category:** Q1 **HEC Category: W**
25. Khan, A. H., (2021). ECG Images dataset of Cardiac and COVID -19 Patients. Data in Brief, 34, 106762.
**IF** 0.99, **WOS Category:** Q2 **HEC Category: X**
26. **Khan, A. H.,** (2020). Sentimental Content Analysis and Prediction of Text. In Intelligent Technologies and Applications: Second International Conference, INTAP 2019, Bahawalpur, Pakistan, November 6–8, 2019, Springer Singapore. HEC Category: Y

### Conference Proceedings:

**1.** **Khan, A. H.** (2023, November). A Transfer Learning Based Detection and Grading of Cataract using Fundus Images. In *2023 25th International Multitopic Conference (INMIC)* (pp. 1-6). IEEE.

**2.** **Khan, A. H**., (2023, May). Machine Learning Techniques for Permission-based Malware Detection in Android Applications. In 2023 9th International Conference on Information Technology Trends (ITT) (pp. 7-13). IEEE.

**3.** **Khan, A. H**., (2022, May). Diagnosis of Liver Disease Induced by Hepatitis Virus Using Machine Learning Methods. In 2022 8th International Conference on Information Technology Trends (ITT) (pp. 154-159). IEEE.

**4.** **Khan, A. H**., (2022, May). Student Performance Prediction in Secondary School Education Using Machine Learning. In 2022 8th International Conference on Information Technology Trends (ITT) (pp. 94-101). IEEE.

**5**. **Khan, A. H.**, (2021, November). Learning Based Approach for Facial Fiducial Points Prediction of Non Frontal Faces. In 2021 International Conference on Innovative Computing (ICIC) (pp. 1-9). IEEE.

**6.** **Khan, A. H**. (2021, November). IoT Based Fish Stress Factor Monitoring System. In 2021 International Conference on Innovative Computing (ICIC) (pp. 1-6). IEEE.

**7.** **Khan, A. H**., (2021, November). Variable Generalization Evaluation of Supervised Learning Models for Detection of Spam Messages. In 2021 International Conference on Innovative Computing (ICIC) (pp. 1-7). IEEE

**8.** **Khan, A. H**., (2021, November). A Study of Image Processing Methods for Investigation of Radiographs. In 2021 International Conference on Innovative Computing (ICIC) (pp. 1-6). IEEE.

**9.** **Khan, A. H**., (2020, August). Big data security and privacy: Current challenges and future research perspective in cloud environment. In 2020 International Conference on Information Management and Technology (ICIMTech) (pp. 977-982). IEEE.

**10.** **Khan, A. H**., (2019, November). Sentimental Content Analysis and Prediction of Text. In International Conference on Intelligent Technologies and Applications (pp. 287- 295). Springer, Singapore.

**11.** **Khan, A. H**., (2019, September). Hierarchical topic modeling for Urdu text articles. In 2019 25th International Conference on Automation and Computing (ICAC) (pp. 1-6). IEEE.

## Funded Projects:

1. "Next-generation diabetes diagnosis and personalized diet-activity management: A hybrid ensemble paradigm" This research was supported by The National Natural Science Foundation Of China Under Grant Nos. 11527801 And 41706201. Submission Date: 2024.

2. "Deep Learning with a Novel Concoction Loss Function for Identification of Ophthalmic Disease". This research was supported by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia [Grant No. 3,363]. Submission Date August 2023.
   Principal Investigator: Ali Haider Khan & COPI: Qazi Mudassar Ilyas

3. "Feature extraction of plant leaf using deep learning" This research was supported by King Khalid University, Abha 61421, P.O. Box 960, Saudi Arabia Grant No. 1989. Submission Date May, 2022.

## PROFESSIONAL SKILLS:

- Medical Image Processing
- Machine Learning
- Deep Learning
- Data Mining
- Web Designing (PHP, HTML, CSS, JQuery, Ajax, JavaScript, Bootstrap)
- Software Construction (JAVA, C++)
- Mobile Applications Development (Android)
- Database Management System and Administration

## ADDITIONAL SOFTWARE/TOOLS:

- Python
- PyCharm
- Android Studio
- Microsoft Visual Studio 2015
- Adobe Photoshop CS 5.0
- Latex

## EDITORIAL MEMBERS AND REVIEWERS:

### EDITORIAL SERVICES:

- **Topic Editor :**Recent Trends of Generative Adversarial Networks (GANs) in Bio-Medical Informatics
  **Journal :** Frontiers in Artificial Intelligence, Frontiers in Big Data
  (https://www.frontiersin.org/research-topics/68106/recent-trends-of-generative-adversarial-networks-gans-in-bio-medical-informatics)

- **Academic Editor** PlosOne Journal (https://journals.plos.org/plosone/static/editorial-board)
- **Associate Editor** Research Center of Computing & Biomedical Informatics (https://jcbi.org/index.php/Main/about/editorialTeam)

**REVIEWERS RECOGNITION:**

- Artificial Intelligence Review
- Journal of Medical Systems
- IEEE Transactions on Cybernetics
- IEEE-Access
- Scientific Reports
- EURASIP Journal on Advances in Signal Processing
- Signal, Image and Video Processing
- Computers, Materials & Continua (CMC) Journal
- Sensors (MDPI)
- Applied Sciences (MDPI)
- Diagnostics (MDPI)
- Healthcare (MDPI)
- Journal of Imaging
- Multimedia Tools & Applications
- PlosOne
- Applied Artificial Intelligence
- Frontiers in AI, Medicine

**CONFERENCE PARTICIPATION:**

- **Participated as a IEEE Auditor** for 7th IEEE International Conference on Energy Conservation and Efficiency (ICECE) 2024 by University of Engineering & Technology Lahore, Lahore – Pakistan, between 06-07 March 2024.
- **Participated as a Guest Speaker** for 5th International Conference on Advancements in Computational Sciences (ICACS-24) by University of Lahore, Lahore – Pakistan, between 19-20 Feb 2024, Topic: Generative AI.
- **Participated as a Guest Speaker** for International Academic Studies Congress IASC 2023/SPRING hosted by MNS University of Agriculture, Multan – Pakistan, between 10-12 May 2023, Topic: Deep Learning for Large-Scale Fraud Detection.
- **Participated as a Keynote Speaker** for International Conference on IT Infrastructure and Computational Security (ITICS) hosted by Lahore Garrison University, Lahore – Pakistan, between 26-27 April 2023.
- **Participated as a Speaker** for International Conference on Innovative Computing - UMT hosted by University of Management & Technology, Lahore – Pakistan, between 9-10 November 2020.
- **Presented Poster** "Rise of Educational Software and Impact of COVID-19 Outbreak in Pakistan" at International Conference on Aerospace Science & Engineering (ICASE-2021) held on 14-16 December 2021 at Institute of Space Technology Islamabad, Pakistan

**STUDENTS SUPERVISED:**

***PhD students:***

| *Sr.* | *Name* | *Reg. ID* | *Institute* | *Status* |
|---|---|---|---|---|
| *1.* | *Sayyid Kamran Hussain* | *MC-PHDCS-219-001* | *Time Institute Multan* | *Thesis Submitted for External Evaluation* |
| *2.* | *Rabia Javed* | *MC-PHDCS-219-003* | *Time Institute Multan* | *Topic Approved by the BASAR* |

***MS/MPhil students:***

| *Sr.* | *Name* | *Reg. ID* | *Institute* | *Status* |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| *1.* | *Muhammad Umair Ahmed* | *F2018288932* | *NCBA&E* | *Pass out* |
| *2.* | *Sidra Bhatti* | *121630760* | *NCBA&E* | *Pass out* |
| *3.* | *Nosha Naeem* | *Sp2023MSDS001* | *LGU* | *Pass out* |

**CUMULATIVE IMPACT FACTOR:**

- **59.74**

**PROFESSIONAL ACCOUNTS:**

- Oric Site
  http://oricportal.lgu.edu.pk/Home/EmployeeDetail?id=2445
- Web of Science Profile:
  https://www.webofscience.com/wos/author/record/JBJ-9644-2023
- Google Scholar Profile:
  https://scholar.google.com/citations?user=k5ZHz1oAAAAJ&hl=en
- ORCID ID:
  https://orcid.org/0000-0002-2393-7600
- Researchgate ID:
  https://www.researchgate.net/profile/Ali-Khan-130

**REFERENCES:**

**Dr. Li Jianqiang [Leader]**
Professor, School of Software Engineering
Beijing University of Technology, Beijing, China
E-mail: lijianqiang@bjut.edu.cn

**Dr. Khalid Masood [Head of Department]**
Associate Professor
Department of Software Engineering
Lahore Garrison University, Lahore, Pakistan.
E-mail: khalid.masood@lgu.edu.pk
TEL: +92 335 7400418