

## Dr. Najeed Ahmed Khan Professor of Artificial Intelligence (HEC Approved Supervisor)

Co-PI National Centre for Artificial
Intelligence (Smart City Lab)
Executive Officer (CSRD)

Caretaker: MoST Chair Professor https://csrd.neduet.edu.pk/

https://esid.neddet.edd.pk/				
Postal Details	Department of Computer Science &			
	Information Technology, NED University of			
	Engineering & Technology Karachi Pakistan.			
Residence	B-120 Block 1, Gulistan-e-Jouhar.			
	Karachi Pakistan.			
Phone	+92 21 99261261 Ext. 2502, 2503,			
	Direct: +92 92 99261298			
Cell	+92 3002171407			
D.O.B	19, March 1966			
Nationality	Pakistani			
Marital Status	Married			
E-Mail	najeed@neduet.edu.pk,			
	naieed@hotmail.com			

#### **Specializations:**

Artificial Intelligence (Computer Vision)

**Objective:** Technology contributions to the world for the benefit of humanity.

## **Administrative Position:**

Head: Centre for Software Research and Development (CSDR), at NED University of Engineering & Technology, established under MoST Endowment - Ministry of Science & Technology, Pakistan.

## **Education:**

- 2011: PhD Computer Science (University of Leeds, United Kingdom)
- 1996: M.Sc. Computer Science, (CGPA 3.2), NED University of Engg. & Technology, Karachi, Pakistan.
- 1990: M.Sc. Applied Mathematics (First Class and First position, Gold Medalist), University of Karachi, Pakistan.
- 1987: Diploma of Associate Engineer (Electronics) First Division, Karachi, Pakistan

#### Membership:

- Senior Member of International Association of Computer Science and Information Technology (IACSIT). (Membership NO.: 80345526)
- Member Asian Council of Science Editors (ACSE)
- Professional Member Association of Computing Machinery (ACM)
   (Membership NO: 5360765)

#### **Editor Journal:**

NED University Journal of Research – Applied Sciences (ISSN 1023-3873)

#### **Reviewer/ Member Advisory Boards:**

- **Member** National Curriculum Revision Committee (computing), Higher Education Commission- (HEC) Pakistan, Oct 2026.
- Member: NCEAC Accreditation Committee 2024 onwards.
- Member HEC Accreditation committee Sindh Region 2024 onwards.
- **Focal person** Prime Minister Initiative support for IT Startups, Specialized IT trainings and Venture Capital under Pakistan Software Export Board September 2024.
- Focal person HEC Centralized Test or IT Graduates leading to placement in IT industry 2023
- Member: Anti- Plagiarism Standing Committee, Bahria University Karachi.
- **Member** Panel of scrutiny, evaluators Competitive Research Projects, Pakistan Science Foundation since 2023.
- **Member** Panel of Examiners for Competitive Examinations, **Federal Public Service** Commission Pakistan 2020-24.
- **Member** Advisory Board / Editorial Board of International Journal of Computer and Related Technologies (IJCRT). ISSN (Print): 2518-4806.
- Reviewer: Int. J. of Applied Pattern Recognition, ISSN: 2049-8888, July 2021.
- Reviewer: International Journal of Computer Theory and Engineering (IJCTE) (ISSN: 1793-820)
- Reviewer: International Journal of Advanced Computer Science and Applications (IJACSA), ISI index. ISSN: 2156-5570
- External examiner: PhD thesis, School of Computing and Informatics at Universiti Teknologi Brunei, 5 July 2021
- External examiner PhD thesis for different universities include: FAST University Karachi, NUST Karachi, Bahria University Karachi, Sindh University Hyderabad and Mehran University Jamshuro, SMI University Karachi Pakistan 2022,2021,2022,2023,2024, 2025
- PC Member/ Reviewer INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE ICAl'2021 (27-28 April 2021) and ICAl'2022 (30-31 March 2022).
- External Member: Board of Faculty (Computing) at FAST National University of Computing Engineering Karachi Campus July 2019 for 3 years.
- External Member: Board of Studies (Computer Engineering) at Sir Syed University of Engineering & Technology Sep 2021 continue.
- External Member: Board of Studies (Computer Engineering) at Mehran University of Engineering & Technology April 2021 for 3 years.
- Member National Curriculum Revision Committee, Higher Education Commission- (HEC) Pakistan, since April 2017.
- **Subject Expert**, Selection Board, 99<sup>th</sup>- 110th Meeting at FAST National University of Computing Engineering Karachi Campus 4 July 2018, 2019, 2020, 2021, 2023.
- HEC Focal Person (Sindh region) Under National Research Program for Universities (NRPU).
- Focal Person HEC- Microsoft Strategic Education Alliance at NED University
- Reviewer & Member Expert panel: HEC- Technology Development Fund projects (TDF).

#### Prizes / Medals/Awards/Honors

- Gold Medalist: <u>Secure First Class and First position in MSc. Applied Mathematics</u> 1990.
- Co-PI Smart City Lab, National Center of Artificial Intelligence awarded from HEC Pakistan.
- **Best Researcher Award** (NED University) for publishing 03 research papers in JCR list Journals in One year 2021.

#### Best teacher award 3 times during 2016-2023

- **Best Teacher** award- **Professor** Category 2023, NED Alumni Association of Southern California (NEDAASC) "Excellence in Teaching Award.
- Best Teacher award- Associate Professor Category 2018, NED Alumni Association of Southern California (NEDAASC), - "Excellence in Teaching Award - 2018" awarded in September 2021.
- **Best Teacher** award- **Assistant Professor** Category 2016, NED Alumni Association of Southern California (NEDAASC) "Excellence in Teaching Award 2017".
- Best publication award 2019: NED Alumni Association of Southern California (NEDAASC) - Najeed K., Hassan P., Arsalan A., Aysha, Sania, Unsupervised Identification of Malaria Parasites using Computer Vision, Pakistan Journal of Pharmaceutical Sciences (PJPS), ISSN:1011-601x, Vol.30, No.1, Jan. 2017 (IF 0.804). pp 223-228.

## **Work Experiences: Current positions:**

- January 2022 to date: Professor, Department of Computer Science & Information Technology, NED University of Engineering & Technology Karachi, Pakistan.
- August 2011- January 2022: Associate Professor, Department of Computer Science & IT, NED University of Engineering & Technology Karachi, Pakistan.
- Executive Officer and Caretaker: MoST Chair Professor established under Ministry of Science & Technology (MoST) Pakistan. <a href="https://csrd.neduet.edu.pk/">https://csrd.neduet.edu.pk/</a>

#### **Previous positions:**

- From May 2005 to August 2011 Assistant Professor of Computer Science, Department of Computer Science and Information Technology, NED University of Engineering& Technology Karachi, Pakistan.
- From Jan 1997 to May 2005 Lecturer of Mathematics, Department of Mathematics, NED University of Engineering& Technology Karachi, Pakistan.
- From Sep 1990 to Jan 1997 Lecturer of Mathematics Govt. Degree College, Government of Sind, Education Department Karachi, Pakistan.

## **Training Course/Seminar/Workshop Participation**

- Conducted 2 day training (26-27th September 2023) on ARTIFICIAL INTELLIGENCE HANDS ON PRACTICAL TRAINING at State Bank of Pakistan under NIBAF.
- Conducted one day training (29<sup>th</sup> May 2024) on Advance Creative Thinking & AI: Tools for Success, at State Bank of Pakistan under NIBAF.
- Arranged, 2nd 'WordCamp' Conference 24 August 2019 at NED University, Karachi in collaboration with HEC- Pakistan. <a href="https://www.thenews.com.pk/latest/516821-wordcamp-2019-evolving-the-wordpress-community-in-pakistan">https://www.thenews.com.pk/latest/516821-wordcamp-2019-evolving-the-wordpress-community-in-pakistan</a>.
- Arranged, 1<sup>st</sup>, 2<sup>nd</sup> and 3rd International Conference on Innovations in Computer Science & Software Engineering, December 2016, 2018 and 2022 at NED University, Karachi in collaboration with HEC- Pakistan. <a href="https://www.nediconics.com/">https://www.nediconics.com/</a>.
- Arranged, more than 10 Microsoft Boot camps at NED University, Karachi in collaboration with HEC and Microsoft- Pakistan during September 2017 – April 2018. https://csrd.neduet.edu.pk/MOS
- Arranged, 3 days Data Science Boot camp at NED University, Karachi in collaboration with HEC and Microsoft- Pakistan April 2018.
- Arranged, 3rd MOS certification Training, 16-20 May 2016 at NED University, Karachi in collaboration with HEC and Microsoft- Pakistan.

- IT Tools for Good Governance HEC training, 25 29 August 2014.
- Two-days Training Workshop on Faculty Development and Capacity Building to Promote Technology Entrepreneurship in Pakistan- 8th & 9th April 2014 @ IBA-CED Main Campus, Karachi, Sponsored by British Council.

## Invited talks/speeches/Chair session:

- Guest Speaker: 2nd International Conference on Computer Science and Applications at the Thar Institute of Engineering, Science and Technology (TIEST), NED University Campus in Mithi, Tharparkar, 1<sup>st</sup> February 2025.
- **Guest Speaker at Aror University of Art, Architecture, Design & Heritage,** Unlocking the Power of Artificial Intelligence: An Inspiring Session for Students and faculty.
- **Guest Speaker/ Gust of Honor:** Graduation Ceremony of CAIE O Level Batch 2023 on Saturday, September 2023.
- Guest Speaker: State Bank of Pakistan, topic 'Al Applications in Banking Sector' Oct 2023.
- Speaker- Tackling Covid-19 using computer vision, 10 July 2020 Online, Facebook channel NCAI.
- Speaker- Tackling Covid-19 using computer vision, 10 July 2020 Online, Facebook channel NCAI.

## **Member NED University Legislative bodies:**

- Elected member Senate & Syndicate, from Feb 2003 May 2005.
- Elected member Senate & Syndicate, from August 2005 May 2006.
- Elected member Senate, from September 2013 2017.

#### Designed and developed.

- Development of Web 3.0 based MetaverCity for learning foreign language course Chinese (in progress).
- Safe Sawari Web based mobile application for community use Under Pak British Women Workforce and Mobility Solution..
- Rapid Notifier Mobile App- Official mobile app for notifying students, faculty at NED University.
- Web portal <a href="https://zakqada.com/">https://zakqada.com/</a> Digital platform to help peole from all over the world by Connecting Donors with Needful.
- Attendance management system—Mobile App- mobile app for NED University.
- **Embedded** Recent AR/VR Technology Trends for NED University Curriculum.
- Designed and developed, prospectus for Master of Computer Science and Information Technology (MCIT) degree program at Department of Computer Science & Information Technology, NED University of Engineering& Technology Karachi, Pakistan, August 2005
- E-Test software, an online web based test software.
- Virtual Tour- NED University of Engineering& Technology Karachi, Pakistan.
- Software for Anti-car theft (in progress)

#### **Supervised PhD Thesis:**

- 1. Title: Unsupervised learning of street traffic patterns for anomaly detection. (Dec 2019)
- 2. Title: Unsupervised Semantic Analysis of TV Commercial Videos. (Dec 2019)
- 3. Title: Unsupervised identification of Fire Hazards using computer vision. (Oct 2021)
- 4. Title: A Universal framework for Open Source Software (OSS) Adoption. (Oct 2021)
- 5. Title: Intent Based User Interaction Learning Model for Seeking Information Online (2024)
- 6. Title: Title: Emotion Recognition from EEG physiolocal signals using Machine Learning.

The researches at S.No 1&2 has been published in National newspapers:

https://www.express.pk/story/1906509/1 and https://tribune.com.pk/story/2113210/1-historic-feat-ned-award-doctorates-13-candidates- todaykarachi-city/?amp=1.

## **Master Dissertation Completed):**

Dissertation Master by research (9- credited hours)
 Title: Automated Classification of histological slides Based on Identification of Tumor Cells, year 2013, Student Name: Yusra Adnan.

## Master level -Independent Study projects (ISP): (6- credited hours)

• More than 100 MS, Independent Study Projects (ISP) have been supervised to date.

## **List of Research Publications:**

#### **Journal Publications:**

- 1. Kamila Mariam Iftikhar, Najeed Ahmed Khan, Muhammad Nizamuddin, Muhammad HamzaSiddiqui, Syeda Ariba Fatima Rizvi, Bisma Haider, Unzeela Abdul Wah, The impact of extended screen time on eye health among university students in karachi: A cross-sectional study, Center for management science research, Volume 3, Issue 4, 2025, ISSN: 3006-5291 3006-5283. https://doi.org/10.5281/zenodo.16940894
- Saima zaidi, Najeed A Khan, Abul Hasan, Bridging Neuroscience and Machine Learning: A Gender-Based Electroencephalogram Framework for Guilt Emotion Identification, Sensors 2025, 25, 1222. https://doi.org/10.3390/s25041222
- Mona Kanwal, Najeed A Khan, Aftab A Khan, A Machine Learning Approach to User Profiling for Data Annotation of Online Behavio, CMC-Computers, Materials & Continua, Vol.78, No.2, 2024/ 10.32604/cmc.2024.047223.
- 4. M. Kanwal, M. A. Khan, N. Ismat, N. A. Khan and A. A. Khan, "Machine Learning Approach to Classification of Online Users by Exploiting Information Seeking Behavior," in *IEEE Access*, vol. 12, pp. 53234-53249, 2024. doi: 10.1109/ACCESS.2024.3383444.
- 5. Kashif Mehboob Khan, Warda Haider, Najeed Ahmed Khan, Darakhshan Saleem, Big Data Provenance Using Blockchain for Qualitative Analytics via Machine Learning, Journal of Universal Computer Science, vol. 29, no. 5 (2023), DOI: 10.3897/jucs.93533.
- Umme Laila, Najeed A. Khan, Asad Arfeen, Mission-Critical Open Source Software Adoption Model Validation using PLS-SEM, Journal of Software; Evolution and Process, ISSN 2047-7481, Oct 2022. doi - 10.1002/smr.2514 Print in 2023 Vol 35, issue 2.
- 7. Rida Aysha, Najeed A Khan. A YOLO-Deep Learning Algorithm for Improved Detection of Cell Phone Usage in Restricted Places, Journal of Xi'an Shiyou University, Natural Science Edition, ISSN 1673-064X, Vol. 18 Issue 9 September 2022 (P-250-257).
- 8. Rana Zeeshan Haider, Ikram Uddin Ujjan , Najeed Ahmed Khan , Eloisa Urrechaga and Tahir Sultan Shamsi. Beyond the In-Practice CBC: The Research CBC Parameters-Driven Machine Learning Predictive Modeling for Early Differentiation among Leukemias, Diagnostics (ISSN 2075-4418), JCR- IF 3.11, January 2022. <a href="https://doi.org/10.3390/diagnostics12010138">https://doi.org/10.3390/diagnostics12010138</a>
- 9. Adnan Baig, Najeed Ahmed Khan, Masood Rafi, A New approach for detection and evaluation of fire, IETE Journal of Research (JCR-IF 1.125). Oct 2021. Oct 2021. Print- TIJR Vol 69 Issue 2, 2023. https://doi.org/10.1080/03772063.2021.1992303
- 10. Umme Laila, Najeed A. Khan, Asad Arfeen, Framework for Identification of Critical Factors for Open Source Software Adoption Decision in Mission-Critical IT Infrastructure Services, IETE Journal of Research (JCR-IF 1.125). Oct 2021. Print-TIJR Vol 69 Issue 2, 2023

## https://doi.org/10.1080/03772063.2021.1994036

- 11. Rana Zeeshan Haider, Najeed Ahmed Khan, Eloisa Maria Urrechagaigartua, Tahir Sultan Shamsi, Mature and Immature/Activated Cells Fractionation: Time for a Paradigm Shift in Differential Leucocyte Count Reporting?, Diagnostics (ISSN 2075-4418), JCR- IF 3.11, May 2021.
- 12. Marwan A. A. Hamid, Najeed A. Khan "Investigation and Classification of MRI Brain Tumors Using Feature Extraction Technique", Journal of Medical and Biological Engineering (Springer) (IF 1.173), pp 307-317, vol 40,(March 2020). 10.1007/s40846-020-00510-1
- Umme Laila, Najeed A. Khan, Asad Arfeen, Shahzad Hassan, Trends of open source software in mission critical its services infrastructures adoption in local environment, Journal of Mechanics of Continua and Mathematical Sciences (Vol. 15, No. 8, August 2020, 0973-8975). <a href="https://doi.org/10.26782/jmcms.2020.08.00058">https://doi.org/10.26782/jmcms.2020.08.00058</a>.
- 14. T. Qamar, N. Z. Bawany, Najeed. A. Khan, "EDAMS: Efficient Data Anonymization Model Selector for Privacy-Preserving Data Publishing", Engineering Technology & Applied Science Research, ISSN2241-4487,1792-8036, vol. 10, no. 2, pp. 5423-5427, Apr. 2020, 10.48084/etasr.3374.
- 15. Marwan A. A. Hamid1, Walid Alhaidari, Waseemullah, Najeed Ahmed Khan, Bilal Ahmed Usmani, Syed. M. Wasim Raza, Dynamic Changes of Multiple Sclerosis Lesions on T2-FLAIR MRI using Digital Image Processing, International Journal of Advanced Computer Science and Applications, Vol. 11, No. 2, 2020.
- 16. Marwan Ahmed Ahmed Hamid, Maria Abdullah, Najeed Ahmed Khan and Yasmin Mohammed Ahmed AL-Zoom, "Biotechnical System for Recording Phonocardiography" International Journal of Advanced Computer Science and Applications, 0(8), 2019. DOI:10.14569/ijacsa.2019.0100864
- 17. Zulaikha Abdullah, Sufizar Ahmad, Azzura Ismail, Najeed A Khan. Processing of Porous Stainless Steel by Compaction Method Using Egg Shell as Space Holder, Key Engineering Materials, ISSN: 1662-9795, Vol. 791, pp 123-128, Nov, 2018. Trans Tech Publications, Switzerland.
- 18. Waseemullah, Najeed A. Khan. Unsupervised Ads detection in TV transmissions, Int. Journal of Advanced Computer Science and Applications, ISSN:2156-5570, 2018.
- 19. Mohd Hafiz Mohd Ali, Hamimah Abdul Rahman , Shahrin Hisham Amirnordin, Najeed Ahmed Khan, Eco-Friendly Flame-Retardant Additives for Polyurethane Foams: A Short Review, Key Engineering Materials, *ISSN:* 1662-9795, Vol. 791, pp. 19-28, 2018. https://doi.org/10.4028/www.scientific.net/KEM.791.19
- 20. Umer F., Najeed A K, Shabbar M A. Unsupervised Video Surveillance for Anomaly Detection of Street Traffic, International Journal of Advanced Computer Science and Applications, pages: ISI. ISSN: 2156-5570, December 2017.
- 21. Najeed Ahmed Khan, Shehnila Zardari, Asif Ahmed Shaikh, Masood Rafi, Sana Shaukat, Computer Vision Based Displacement Measurement of Shake Table, International Journal of Computer Science & Network Security, Vol.17, No.5 2017.
- 22. Sarang S., M. Ajmal Sawand, Najeed Ahmed Khan and Farhan Badar Solangi, Comprehensive Understanding of Intelligent User Interfaces, International Journal of Advanced Computer Science and Applications, pages, 395-401, Vol.08, Issue 6, June 2017.

- 23. Najeed Ahmed Khan, M. Ajmal Sawand, Maryam Qadeer, Anum Owais, Sarah Junaid, Phunparah Shahnawaz, Autism Detection using Computer, International Journal of Computer Science & Network Security, Vol.17, No.4 2017.
- 24. Najeed Ahmed Khan, Umair Amin, Waseemullah, Muhammad Umer. Unsupervised Commercials Identification in Videos. International Journal of Advanced Computer Science and Applications (IJACSA), ISI. ISSN: 2156-5570 Volume 8 Issue 2, pp 127-133, March 2017.
- 25. Najeed K., Hassan P., Arsalan A., Aysha, Sania, Unsupervised Identification of Malaria Parasites using Computer Vision, Pakistan Journal of Pharmaceutical Sciences (PJPS), ISI, ISSN:1011-601x, Vol.30, No.1, January 2017 (Impact Factor: 0.804). pp 223-228.
- 26. Engr. Maria Sohail, Najeed Ahmed Khan, Shariq M. Khan, Domineering Analysis & Mitigation of IP-SEC VPN Using GNS3, International Journal of Computer Science & Network Security, pages 245-250, Master Journal list, Vol.17, No.4 2017.
- 27. Ajmal S. M. Najeed A. K., Privacy and Security mechanisms for eHealth monitoring systems, International Journal of Advanced Computer Science and Applications (IJACSA), ISI index. ISSN: 2156-5570, Volume 8 No. 4,pages; 533-537, April 2017.
- 28. Shariq M. Khan, Mubashir M. Khan, Najeed A. Khan, Route Constancy and Energy Aware Routing Protocol for MANET, International Journal of Computer Science & Network Security, Vol.17, No.5 2017.
- 29. M. Ajmal Sawand, Najeed Ahmed Khan, Abdul Rehman Soomrani and Sheraz Ali, Energy efficient e-Healthcare system, International Journal of Computer Science & Network Security, Vol.17, No.4 2017.
- 30. Shariq M. Khan, Mubashir M. Khan, Najeed A. Khan, Waseemullah, Efficient and Reliable Reactive Routing Protocol for Mobile Ad-Hoc Network, International Journal of Computer Science & Network Security, Vol.17, No.4 2017.
- 31. Engr. Maria Abdullah, Najeed Ahmed Khan, Intelligent System Using MI in E-Learning Environment, Journal of Multidisciplinary Engineering Science and Technology, ISSN:2458-9403 Volume. 4, Issue. 4, April 2017.
- 32. Najeed A Khan, Shariq M Khan, Sana Jamaluddin, Urooj Iltifat, Use Hand Gesture to Write in Air Recognize with Computer Vision, , International Journal of Computer Science & Network Security, Vol.17, No.5 2017.
- 33. Siva Kumar Subramaniam, Shariq M. Khan, Najeed A. Khan, TCP Timeout Mechanism for Optimization of Network Fairness and Performance in Multi-Hop Pipeline Network, International Journal of Computer Science & Network Security, Vol.17, No.5 2017.
- 34. Siva Kumar Subramaniam, Shariq M. Khan, Najeed A. Khan, Enhancing Pipeline Network Performance Using Dual Interleaving Cluster Head Routing Protocol, International Journal of Computer Science & Network Security, Vol.17, No.4 2017.
- 35. Najeed K., Omer A. S., Ajmal S. M., Umer Farooq U. M., Tracking of Occluded and Cluttered Objects. International Journal of Computer Science and Information Security (IJCSIS), ISI, ISSN: 1947-5500, Vol. 14 No. 11 (Impact Factor: **0.519**). December 2016.
- 36. Najeed K., Saman A, Shehnila Z, Yusra A, Sehrish S., Saba Hassan Shamim Unsupervised Cancer Detection using Computer Vision. International Journal of Computer Science and Information Security (IJCSIS), ISI, ISSN: 1947-5500, (Impact Factor: **0.519**). Volume 14, Issue 10, p- 724-732, October 2016.
- 37. Shehnila Z., Najeed K., Mohsin Ali Memon., Systematic Analysis of Risks in Cloud Architecture, International Journal of Computer Science and Information Security (IJCSIS), ISI, ISSN: 1947-5500, (Impact Factor: **0.519**). Vol. 14 No. 11 December 2016.
- 38. Najeed K., Ajmal S. M., Marium H., Arwa K., Mehak T., Real Time Monitoring Of Human Body Vital Signs Using Bluetooth & WLAN. International Journal of Advanced Computer Science and Applications, ISI. ISSN: 2156-5570 Vol.7 Issue 10, pp 210-216, October 2016.

- 39. Najeed K., Shehnila Z., Shabeen K., Sehrish S., A Method for Tumour Detection on Brain MRI Image by implementing SVM, International Journal of Computer Science and Information Security (IJCSIS), ISI, ISSN: 1947-5500, (Impact Factor: **0.519**). pp. 154-160 Vol. 14 No. 8 AUG 2016.
- 40. Shehnila Z., Najeed K., Ajmal S. M., Dealing with Cloud Adoption Risks: a Goal-Oriented Requirements Negotiation Approach, International Journal of Computer Science and Information Security (IJCSIS), ISI, ISSN: 1947-5500, (Impact Factor: **0.519**). Vol. 14 No. 9, p 884-887, September 2016.
- 41. Ajmal S. M., Najeed K., Shehnila Z., Combining Weak DFAs to Build Strong Hypothesis Using AdaBoost Classification Algorithm, International Journal of Computer Science and Information Security (IJCSIS), ISI, ISSN: 1947-5500, (Impact Factor: **0.519**). Vol. 14 No. 9, September 2016, p. 894-899
- 42. Najeed K., David C. H., Unsupervised learning of Appearance classes from Video, NED University Journal of Research Applied Sciences, (ISSN: 1023-3873), Vol. 11, No.2, 2014, pp 15-25.
- 43. Najeed K, Mohiuddin S. S, Baig M. M, Tawha A. M. Statistical Analysis of Constraints Acquiring Higher Secondary Education, International Journal of Database Theory and Application Vol.7, No.2 (2014), pp.141-154.

#### **Conference Publications:**

- 1. Haman Farooq, Najeed A Khan, Safe-Campus: Leveraging AI for Advanced Surveillance and Security Enhancement, 4th International Conference on Innovations in Computer Science (ICONICS), IEEE Nov 2024, DOI:10.1109/ICONICS64289.2024.10824618.
- 2. Rana Zeeshan Haider, Najeed Ahmed Khan. Extended CBC Channels and Machine Learning: We could many Diagnostic Tales Unfold, Trust Me! XXXVIth International Symposium on Technical Innovations in Laboratory Hematology, New Orleans, LA New Orleans Marriott, May 11-13, 2023. https://www.islh.org/2023/program.php?page=program&displayday=1
- Waseemullah, Najeed A Khan, Face-to-Camera distance estimation using Machine Learning, 3rd International Conference on Innovations in computer science and Software Engineering (ICONICS), IEEE Dec 14-15, 2022. NED University of Engineering & Technology Karachi Pakistan. https://ieeexplore.ieee.org/document/10100618/
- 4. Waseemullah, Najeed A Khan, Machine Learning approaches for the Prediction of Nutrition deficiency among women of different age group, 3rd International Conference on Innovations in computer science and Software Engineering (ICONICS), IEEE Dec 14-15, 2022. NED University of Engineering & Technology Karachi Pakistan. https://ieeexplore.ieee.org/document/10100340/
- 5. Maheen Ayub, Najeed A. Khan, Rana Zeeshan Haider. Wheat Crop Field and Yield Prediction using Remote Sensing and Machine Learning, 2nd International Conference on Artificial Intelligence (ICAI 2022), March 30-31st, 2022 at the National University of Sciences and Technology (NUST), Islamabad, Pakistan. pp. 158-164, Doi: 10.1109/ICAI55435.2022.9773663
- 6. Umer F., Najeed A. K. Detect Anomaly in behavior of Networks using supervised and unsupervised techniques, ICCRT International Conference, December 2017.
- 7. Najeed A. K., Hassan P., Arsalan A., Aysha, Sania, Unsupervised Identification of Malaria Parasites using Computer Vision, IEEE-11th International Joint Conference on Computer Sciences and Software Engineering (JCSSE 2014), Thailand.
- 8. Najeed A. K., Hyder, H., "Identification of suspicious activities using Kalman filter", in INFORMS international Conference (June 24-28, 2006), Hong Kong.

# **Grants received/ Funded Projects:**

Project Title	Donor	Amount PKR (M)	Team Members
National Centre for Artificial Intelligence (NCAI) 2018 - 2021	HEC- Pakistan	180 Million	(CO-PI)-Smart City Lab. Dr. Najeed Ahmed Khan
Web 3.0 based MetaverCity Digital Classroom – Learn foreign language	MoST Endowment Fund	2.07 Million	PI- Dr. Najeed Ahmed Khan
Women Workforce and Mobility Solution"	British Asian Trust, Pakistan	1.8 Million	PI- Prof. Dr. Noman Ahmed Co-PI: Dr Saeed Uddin, Dr. Najeed Ahmed Khan
Development of IoT enabled Safety monitoring system for construction worksites in Pakistan	MoST Endowment Fund /NED Research fund - November 2022	01 Million	PI- Prof. Dr. Rizwan Farooqu Co-PI: Prof. Dr. Najeed Ahmed Khan
Real time crowed counting Covid -19 SoPs detection system- FYP	IGNITE NGIRI – July 2021	0.08 Million	Dr. Najeed Ahmed Khan (PI)- <b>Completed</b>
Machine Learning based model for early screening Cancer using CBC	IGNITE NGIRI – July 2021	0.08 Million	Dr. Najeed Ahmed Khan (PI)- <b>Completed</b>
<b>PhD Thesis:</b> Emotion Recognition from facial expression using machine learning	MoST Endowment Fund /NED Research fund - August 2020	4 Million	Dr. Najeed Ahmed Khan
<b>PhD Thesis</b> Intent based User Interaction Learning Model for online Image search	MoST Endowment Fund /NED Research fund - August 2020	3.9 Million	Dr. Najeed Alfmed Khan (Completed)
Kaam Asan- Final year Project	NED Alumni Association of Southern California (NEDAASC)- June- 2020	0.09 Million	Dr. Najeed Ahmed Khan (PI)- <b>Completed</b>
Video surveillance-based traffic management system- FYP	IGNITE NGIRI – August 2020	0.07 Million	Dr. Najeed Ahmed Khan (PI)- <b>Completed</b>
Expert Planner - FYP	IGNITE NGIRI- August 2020	0.035 Million	Dr. Najeed Ahmed Khan (PI)
Applications in Engineering using Augmented Reality FYP	IGNITE NGIRI 2019	0.070 Million	PI- Dr. Najeed Ahmed Khan- (Completed)
Augmented and Virtual Reality in education FYP-2019	IGNITE NGIRI 2019	0.070 Million	PI- Dr. Najeed Ahmed Khan- (Completed)
Disaster Management System (DIMS). Review & formulate report for development of (DIMS) for Pak.	National ICT R&D, Ministry of Information Technology, Pakistan	4 Million	Prof. Sarosh H. Lodi, Prof Dr. Masood Rafi, Dr. Najeed Ahmed Khan (Completed
E-Conference Table	National ICT R&D, Ministry of Information Tech.	0.074 Million	Dr. Najeed Ahmed Khan (PI) ( <b>Completed</b> )
Evaluation project: Procurement performance management systems	Reform Support Unit, Edu. & Literacy Deptt. Govt. of Sindh under the World Bank	0.175 Million	Dr. Najeed Ahmed Khan (Completed)
PhD Thesis Unsupervised learning of street traffic patterns for anomaly detection.	MoST Endowment Fund /NED Research fund- 2017	4.0 Million	Dr. Najeed Ahmed Khan (Completed)
PhD Thesis Unsupervised Semantic Analysis of TV Commercial Videos.	MoST Endowment Fund /NED Research fund- 2017	4.0 Million	Dr. Najeed Ahmed Khan (Completed)
PhD Thesis Design a framework for universal open source software adoption model	MoST Endowment Fund /NED Research fund-2018	3.1 Million	Dr. Najeed Ahmed Khan (Completed)
PhD Thesis Unsupervised identification of fire intensity and its hazards using computer vision	MoST Endowment Fund / NED Research fund -2018	4.0 Million	Dr. Najeed Ahmed Khan (Completed)