

Dr. SHARIQ MAHMOOD KHAN

(HEC APPROVED SUPERVISOR)

PROFESSOR

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

NED UNIVERSITY OF ENGINEERING & TECHNOLOGY

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ACADEMIC QUALIFICATION

Doctor of Philosophy (Ph.D.) Brunel University London , UK Title: Reliable On-Demand Routing Protocols for Mobile Ad-Hoc Networks		Nov 2015
Master of Computer Science & Information Technology NED University of Engineering & Technology, Karachi Concentration: Networks Management, Network & Information Security	CGPA: 3.95	June 2007
Bachelor of Computer Science & Information Technology NED University of Engineering & Technology, Karachi	"A-I"	Feb 2005
HSC(Pre-Engineering) Sindh Government DJ Science College, Karachi	"A"	Aug 2000

WORK EXPERIENCE (ACADEMIC AND ADMINISTRATIVE)

Professor Department of Computer Science & Information Technology. NED University of Engineering & Technology, Karachi	2022 – Date
Associate Professor Department of Computer Science & Information Technology. NED University of Engineering & Technology, Karachi	2018 – 2022
In-Charge NED Photography Society NED University of Engineering & Technology, Karachi	2017 – 2022
FYP Coordinator Department of Computer Science & Information Technology. NED University of Engineering & Technology, Karachi	2019 – 2021
Turnitin Focal Person – (CSIT and SE)	2015 – Date
Final Year Class Advisor Department of Computer Science & Information Technology. NED University of Engineering & Technology, Karachi	2015 – 2019
Assistant Professor Department of Computer Science & Software Engineering. NED University of Engineering & Technology, Karachi	2009 – 2018
Lecturer Department of Computer Science & IT. NED University of Engineering & Technology, Karachi	2007 – 2009
IT-Manager	2005 – 2007

ADMINISTRATIVE COMMITTEES

Board of Studies Member Department of Computer Science & IT, NED University.

Board of Review Member, Audit Department, NED University.

Member: Industrial Advisory Board, Department of Computer Science & IT, NED University.

Member: MS Admission Committee, Department of Computer Science & IT, NED University.

FUNDED PROJECTS

- **PhD. Research Project**
 - **Title:** Enhancing Packet Delivery in Intelligent Transportation System.
Total Sanctioned Research Fund: 2.84 (Millions PKR)
Funding Agency : NED University and MoST Endowment Fund
Status : In Progress
- **Final Year Project**
 - Recipient of Ignite - National Technology Fund 2017-18
Status: Completed

TRAINING : HIGHER EDUCATION

- **Higher Education Teachers Training 2019**
 - Successfully completed this capacity building course from NED University.
 - This course was based on the course from the Harvard University
Titled " Higher Education Teaching Certificate"

AWARDS/ SCHOLARSHIPS

▪	Recipient of Faculty Development Scholarship for Ph.D. at Brunel University, UK.	2010
	Master with CGPA 3.95/4	NED University Karachi 2007
	Bachelor with Distinction	NED University Karachi 2005
Winner	IEEE Student Branch Paper Presentation, 'Urdu Mobile Phone Messenger', IEEE Karachi	2004
Winner	ProQuest 2003 Software Competition, Karachi University	2003
Cash Award	The Vice Chancellor NED University of Engineering & Technology Engr. Abul Kalam sanction cash award for Winning "All Pakistan Software Competition (ProQuest)" held at Karachi University.	2003

CONFERENCES ORGANIZED

- **Conference Secretary**, 2nd International Conference on Innovations in Computer Science & Software Engineering (**ICONICS'18**), December 5-6, 2018.

- **Conference Secretary**, 1st International Conference on Innovations in Computer Science & Software Engineering (**ICONICS'16**), December 15-16, 2016.

CREATIVE CONTRIBUTIONS

- **Director** : NED University welcome video (showcased on NED official website)
YouTube Link : <https://www.youtube.com/watch?v=6c4yF5992KE>
- **Production Manager** : Documentary on NED University "A tale of 100 years – An enchanting engineering Legacy"
YouTube Link : <https://www.youtube.com/watch?v=GtWcmGmSM4>
- As an In-Charge of NED Photography Society provided photographic support in the following NED University Annual Reports :
 - NED University Annual report 2019-20
 - NED University Annual report 2018-19
 - NED University Annual report 2017-18
 - NED University Annual report 2016-17

PH.D. RESEARCH SUPERVISION

- Currently supervising four Ph.D. Student in the following research areas
 - Vehicular Ad-Hoc Network
 - IoT Security
 - Fog Computing

COMPLETED MS RESEARCH SUPERVISION

- Maryam Anwer, Deep Learning Approach for Internet of Things to Distributed Attack Detection Scheme, Spring 2019
- Madiha Amjad Hussain, Artificial Intelligence in Cyber Security, Spring-2019
- Hina Siddiqi, Charity Fund Based on Block Chain, Fall-2019
- Tooba, Improving IoT based Health Care Systems with the integration of Fog Computing Secure Layer, Fall-2019
- Muzna Junaid Chisti , Body Sensor Network ID Based Cryptography, Fall-2019
- Nazia Majeed, Masquerading Attack detection using received signal strength, Fall-2019
- Qurrat UL Ain Shamsher, Analysis of Cyberattacks against IoT Connected Devices, Fall-2019
- Jibran Resheed Khan, Underwater Wireless Sensor Network Communications, Fall-2019
- Tasneem Mansoor, Efficient Duping Technique for Data Confidentiality in Online Transaction, Spring-2020
- Mahnoor Fatima, Securing Medical Data Transmission using Cryptography and Steganography Spring-2020
- Muhammad Nabeel Ibrahim Khan Analysis of SDN Controller in Densely Populated Wireless Network Spring-2020

COURSES TAUGHT

- Cryptography (Master's Level Course)
- Advanced Computer Networking (Master's Level Course)
- Network & Information Security (Undergraduate Level Course)
- Wireless Networks & Mobile Computing (Undergraduate Level Course)
- Data Structures Algorithm & Applications (Undergraduate Level Course)

- Programming language (Undergraduate Level Course)
- Fundamentals of Information Technology (Undergraduate Level Course)

RESEARCH PUBLICATIONS

- Kazi, Abdul Karim, Khan, Shariq Mahmood "DyTE: An Effective Routing Protocol for VANET in Urban Scenarios" Engineering, Technology & Applied Science Research. Vol. 11, No. 2. 2021 6979-6985
- A. K. Kazi and S. M. Khan, "Working of various routing protocols in Vehicular Ad-hoc Network: A Survey," University of Sindh Journal of Information and Communication Technology, vol. 4, no. 4, pp. 278–286, Dec. 2020.
- M. J. Chishti and S. M. Khan, "Body Sensor Network – ID-Based Cryptography," University of Sindh Journal of Information and Communication Technology, vol. 4, no. 3, pp. 143–151, Oct. 2020.
- Subramaniam, S. K., Khan, S. M., & Nilavalan, R. (2018). STATIC NETWORK PERFORMANCE OPTIMISATION USING DUAL INTERLEAVE ROUTING ALGORITHM. *IIUM Engineering Journal*, 19(1), 129 - 143.
- Khalil, Usman & Nasir, Adnan & Khan, S.M. & Javid, T & Raza, S.A. & Siddiqui, A. (2018). Automatic Road Accident Detection Using Ultrasonic Sensor. 206-212. 10.1109/INMIC.2018.8595541.
- Khan, N.A., Khan, S.M., Kanji, S.J. and Iltifat, U., 2017. Use Hand Gesture to Write in Air Recognize with Computer Vision. *IJCSNS*, 17(5), p.51.
- Awan, J.H., Memon, S., Khan, S.M., Usman, M., Khan, R.A., Abbasi, S., Noonari, A.Q. and Hussain, Z., 2017. A user friendly security framework for the protection of confidential information. *International Journal of Computer Science and Network Security (IJCSNS)*, 17(4), p.215.
- Abdullah, M., Khan, N.A., and Khan, S.M, 2017. Domineering Analysis & Mitigation of IP-SEC VPN Using GNS3. *International Journal of Computer Science and Network Security (IJCSNS)*, 17(4), p.245.
- M. A. Memon, S. Memon and S. Khan, "THD Minimization from H-Bridge Cascaded Multilevel Inverter Using Particle Swarm Optimization Technique," *Mehran University Research Journal of Engineering & Technology*, vol. 36, pp. 33-38, January 2017.
- S. Subramaniam, S.M.Khan et al, "Network performance optimization using odd and even routing algorithm for pipeline network," in 2016 8th Computer Science and Electronic Engineering (CEECE), 2016, pp. 118-123.
- S. M. Khan, R. Nilavalan and A. F. Sallama, "A Novel Approach for Reliable Route Discovery in Mobile Ad-Hoc Network," *Wireless Personal Communications*, vol. 83, pp. 1519-1529, July 2015.
- A. Sallama, M. Abbod and S. M. Khan, "Applying Sequential Particle Swarm Optimization Algorithm to Improve Power Generation Quality," *International Journal of Engineering and Technology*, vol. 4, pp. 223-233, 2014.
- M. Adnan, P. A. Longley and S. M. Khan, "Social dynamics of Twitter usage in London, Paris, and New York City," *First Monday*, vol. 19, 2014.
- S. M. Faraz, S. I. Behlim, S. M. Khan and S. A. Sattar, "Interactive training framework a new approach to e-Learning," in *Proceedings of the 7th International Conference on Frontiers of Information Technology*, 2009, pp. 79.
- S. M. Khan, Q. Ni "Delay-Constraint Routing Simulation For Vehicular Ad Hoc Network", Presented Poster on IEEE-SED-ResCon, June 2011, Brunel University, UK.

EXPERT REVIEWER OF JOURNALS

- JCR Journal: "Wireless Personal Communications" Published by "Springer USA" (ISSN: 0929-6212)
- JCR Journal: "Ad Hoc & Sensor Wireless Networks" Published by " Old City Publishing Inc., USA" (ISSN: 1551-9899)
- JCR Journal: "Mobile Networks and Applications" Published by "Springer Switzerland" (ISSN : 1383-469X)
- International Journal : "Engineering Sciences and Technology International Research Journal" (ISSN: 2521-5027)

- International Journal of Computer Applications in Technology (ISSN: 0952-8091)
- International Journal of Communication Networks and Distributed Systems (ISSN: 1754-3916)

PROFESSIONAL TRAININGS

- Participated in Workshop as Nominee of NED University: **“Cloud Client Computing & Virtualization”** held on 9th March 2017.
- Training as Nominee of NED University: **Huawei Authorized IT & Network Academy (HAINA)** , Huawei Certified Network Associate (HCNA) at UET Lahore from 17-10-2016 to 21-10-2016
- Participated in Symposium as Nominee of NED University: **“International Entrepreneurship Educators Symposium”** held in the Institute of Business Administration (IBA), Karachi.
- Attended training on **“Copyright for Dissertations and Theses”** held on 25th October 2010 at **Brunel University London**.
- Attended training on **“Referencing with RefWorks”** held on 20th October 2010 at **Brunel University London**
- Attended training on **“Early-Stage Research Module”** held on 18th October 2010 at **Brunel University London**
- Attended training on **“Exploiting E-Journals”** held on 13th October 2010 at **Brunel University London**
- Successfully completed 5 days workshop as Nominee of NED University on **“High Performance Computing”** held at GIK Institute. This workshop is organised by GIK Institute in collaboration with **University of Illinois, Chicago USA** from 7th to 11th August 2006.

PARTICIPATION IN CONFERENCES

- Participated in **2nd International Conference on Innovations in Computer Science & Software Engineering (ICONICS’18)** 5th and 6th December 2018 organized by Department of Computer Science & Software Engineering NED UET, Karachi.
- Participated in **1st International Conference on Innovations in Computer Science & Software Engineering (ICONICS-2016)** 15th and 16th December 2016 organized by Department of Computer Science & Software Engineering NED UET, Karachi.
- Attended: **6th International Mechanical Engineering Congress on Green Systems and Innovation** held on 15th and 16th July 2016 at IEP Convention Centre Karachi. IEP Karachi and NED UET Karachi jointly organize this conference.
- Participated in conference as Nominee of NED University: **“Conference on Hacking and Security (CHASE-2007)”** held on 1st-3rd February 2008 at Lahore.
- Attended **“Microsoft Pakistan Developer Conference (PDC)”** held on 17th – 19th June 2003 at Marriott and Pearl Continental Hotel, Karachi.

COUNTRIES VISITED

- United Kingdom
- France
- United Arab Emirates