

Aamir Zeb Shaikh

Phone: +92 333 2281718

C-203, Ruff Lake Drive, Gulistan-e-Johar, Blk-18, Khi.Pakistan

Email: azebshaikh@gmail.com

OBJECTIVE

Presently working as a faculty member in Telecommunications Engineering Department at NED University of Engineering & Technology, Karachi Pakistan; Interested in furthering my career in the field of Telecommunications Engineering to attain highest levels.

WORK EXPERIENCE

NED University of Engineering & Technology, Khi. Pakistan.

2001 - Present

- **Assistant Professor**, Electronic Engineering
- **In Charge**, PHS/WLL & Radio Engineering Laboratory
- **Class Advisor**, FE TC
- **Lecturer**, Electrical Engineering

June 2005 – Present

July 2015 – 2018

July 2018 – Present

Aug 2001 – Jun 2005

The University of Texas at Dallas

2011

- **Research Fellow**, Erik Jonsson School of Engineering & Computer Science

EDUCATION

2009- 2015

Doctor of Philosophy

Department of Electronic Engineering, NED University of Engineering & Technology, Karachi Pakistan.

Thesis: Techniques for Performance Improvement of Cognitive Radio.

Doctoral Courses: Advanced Topics in Wireless Communication, Advanced Topics in Digital

Communication, Adaptive Filters, Detection & Estimation, Game Theory in Wireless Communication, Cognitive Radio.

2003-2005

Master of Engineering

Department of Electrical Engineering, NED University.

Major Subjects: Probability & random Processes, Microwave Systems, Mobile Telephone Systems,

Communication Networks, Digital Communication Theory, Digital Signal Processing, Information Theory.

1997-2001

Bachelor of Engineering

Department of Electrical Engineering, NED University.

Thesis: Home Security system Using Microcontroller 89C51 and Visual Basic.

Advisor: Ms. Shahnaz Tabassum, Assistant Professor.

1994-1996

Intermediate (Pre Engineering)

Government Degree College Sukkur, Sindh.

Gold Medal & Merit Certificate for securing First Position in Sukkur Board.

PUBLICATIONS

- SM Abbas Zaidi, Aamir Zeb Shaikh & Asad Arfeen “Communication Mode Selection and Game Theoretic Bandwidth Sharing Model for D2D Relay Communication” Volume 10, Issue 6 (June 2023), Pages: 180-186. IJAAS
- Naqvi, Shabbar, Aamir Zeb Shaikh, Talat Altaf, and Saurabh Singh. "Fuzzy Logic Enabled Stress Detection Using Physiological Signals." In *Emerging Technologies in Computing: 4th EAI/IAER International Conference, iCETiC 2021, Virtual Event, August 18–19, 2021, Proceedings 4*, pp. 161-173. Springer International Publishing, 2021.
- Shaikh, Aamir Zeb, Shabbar Naqvi, Minaal Ali, Yamna Iqbal, Abdul Rahim, Saima Khadim, and Talat Altaf. "Opportunistic use of Spectral Holes in Karachi using Convolutional Neural Networks." *IJACSA* 11, no. 2 (2020)
- Naqvi, Shabbar, Minaal Ali, Aamir Zeb Shaikh, Yamna Iqbal, Abdul Rahim, Saima Khadim, and Talat Altaf. "Exploiting White Spaces for Karachi through Artificial Intelligence: Comparison of NARX and Cascade Feed Forward Back Propagation." *IJACSA* 11, no. 2 (2020).
- Haadia Rasheed, Aamir Zeb Shaikh, Shabbar Naqvi, Sarah Salim, Rubab Farooq, Sania Fatima, Talat Altaf "Design and Working of a Vending Machine for Pre-Hospital Cardiac Aid in Pakistan" *IJCSNS* Vol. 20 No. 2 pp. 44-50,2020
- Muhammad Ehsan, Shabbar Naqvi, Aamir Zeb Shaikh, Syeda Hafsa, Muhammad Younus "Towards Development of a Blockchain Based Healthcare Management System in Pakistan" *IJCSNS* Vol. 20 No. 1 pp. 212-217. 2020
- Ahmed, Mumtaz, Shabbar Naqvi, Irfan Ali, Salah Uddin, and Aamir Zeb Shaikh. "A Fuzzy Inferencing System for Highlighting the Complexities Involved in Electronic Surveys with Emotions." *IJCSNS* 19, no. 10 (2019): 6.
- Muneeb Aalam Khan†, Aamir Zeb Shaikh†, Shabbar Naqvi††, Saima Khadim*††, Talat Altaf** , “Deep Learning Enabled Spectrum Sensing Radio for Opportunistic Usage” *IJCSNS* 19, no. 11 (2019): 6.
- Ahmed, Shabbir, Aamir Zeb Shaikh, and Altaf Ahmed. "Survey on Fuzzy Logic Enabled Cognitive Radios." In *International Conference for Emerging Technologies in Computing*, pp. 190-196. Springer, Cham, 2018.
- Ayesha, Aamir Zeb et al.”GNSS based Smart Vehicle Security System” *Balochistan Journal of Engg and Applied Sciences*, Balochistan April 2018.
- Naqvi, Syed Affif Raza, Aamir Zeb Shaikh, Krishan Lal Khatri, Altaf Ahmed Mugheri, and Shabbir Ahmed. "Adaptive Threshold Technique for Spectrum Sensing Cognitive Radios Under Gaussian Channel Estimation Errors." In *International Conference for Emerging Technologies in Computing*, pp. 183-189. Springer, Cham, 2018.
- Shabbir Ahmed Baloch and Aamir Zeb Shaikh”Fuzzy Logic enabled Spectrum Access Scheme for Cognitive Radio Applications” *International Conference on Innovations in Computer Science* 2018

- Khadim, Saima, et al. "Smart Cognitive Cellular Network." *International Journal of Future Generation Communication and Networking* 10.12 (2017): 23-34.
- Waqar, Adnan, et al. "A Survey on Cognitive Radio Network using Artificial Neural Network." *International Journal of Future Generation Communication and Networking* 10.11 (2017): 11-18.
- Ahmed, Syed Nauman, et al. "Impact of Cloud Attenuation on Ka-Band Satellite Links in Karachi, Pakistan." *J. Appl. Environ. Biol. Sciences* 7.10 (2017): 71-77.
- Khan, Ammar Ahmed, et al. "A Novel Cognitive Radio Enabled IoT System for Smart Irrigation." *Journal of Informatics and Mathematical Sciences* 9.1 (2017): 129-136.
- Syed Nauman Ahmed, Aamir Zeb Shaikh, Shabbar Naqvi, and Talat Altaf. "Impact of Rain Attenuation for Satellite Links at C, Ku, K, Ka and mm Bands in Karachi" *Journal of Applied Environmental and Biological Sciences*. Accepted June 2016 (Thomson Reuters ISI indexed)
- Fizza Irfan, Aamir Zeb Shaikh, Shabbar Naqvi, and Talat Altaf. "Performance Analysis of Improved Energy Detector under Noise Uncertainty" *Journal of Applied Environmental and Biological Sciences*. Accepted June 2017 (Thomson Reuters ISI indexed)
- Syed Shahram Najam, Aamir Zeb Shaikh, Shabbar Naqvi, and Talat Altaf. "Remote Monitoring System for Diesel Generators at Cellular Base Stations" *International Journal of Advanced and Applied Sciences*. Accepted to appear in Volume 4, Issue 8 (August 2017), Pages: 133-138. <https://doi.org/10.21833/ijaas.2017.08.019>. Print ISSN: 2313-626X (Thomson Reuters ISI indexed)
- Syed Shahram Najam, Aamir Zeb Shaikh and Shabbar Naqvi, "A Novel Hybrid Biometric Electronic Voting System: Integrating Finger Print and Face Recognition" *Mehran University Research Journal of Engineering & Technology*, Accepted 2017. HEC X Category
- Khan, Ammar Ahmed, Aamir Zeb Shaikh, Shabbar Naqvi, and Talat Altaf. "Implementation of Cooperative Spectrum Sensing Algorithm using Raspberry Pi." *International Journal of Advanced Computer Science & Applications* 1, no. 7 (2016): 363-367. (Thompson and Reuters Indexed)
- Syed Shahram Najam and Aamir Zeb Shaikh "Greenhouse Monitoring And Automation System" *International Conference on Innovations in Computer Science & Software Engineering*, 2016
- Syed Shahram Najam, Aamir Zeb Shaikh, Shabbar Naqvi, and Talat Altaf. "Remote Monitoring System for Diesel Generators at Cellular Base Stations" submitted to *International Journal of Advanced and Applied Sciences* 2016. (Thomson Reuters ISI indexed)
- Ammar Ahmed Khan, Aamir Zeb Shaikh, Shabbar Naqvi, and Talat Altaf. "A Novel Cognitive Radio enabled IoT System for Smart Irrigation" *Journal of Informatics and Mathematical Sciences* Accepted 2016 (Thomson Reuters ISI indexed)
- Syed Nauman Ahmed & Aamir Zeb Shaikh, "Impact of Elevation Angle on Rain Attenuation in Satellite Communications", *First International Electrical Engineering Congress (IEEC 2016)*
- Shaikh, Aamir Z., and Lakshman Tamil. "Cognitive Radio Enabled Telemedicine System." *Wireless Personal Communications* 83, no. 1 (2015): 765-778. (Thompson and Reuters Indexed)
- Aamir Z. Shaikh & Talat Altaf, "Performance Analysis of a Cluster-based Correlated Cognitive Radio Network", *Journal of Research and Practice in Information Technology*, Accepted 2015 to appear in Volume 47, Issue # 1. (Thompson and Reuters Indexed)
- Ammar Ahmed Khan & Aamir Z. Shaikh, "Design and Implementation of Gateway for Wireless Sensor Networks: Zigbee & Bluetooth", *IEEEP Multitopic Symposium* March 25-26, 2015. Karachi
- Aamir Zeb Shaikh and Talat Altaf. "Analysis of Mobility driven Spectrum Sensing Cognitive Radio under Suburban Environments" *Proceedings of IMTIC 2015*

- Aslam, M.I.; Shaikh, A.Z., "Joint and marginal probabilities for time of arrival and angle of arrival using ellipsoidal model," Computer, Control & Communication (IC4), 2013 3rd International Conference on , vol., no., pp.1,5, 25-26 Sept. 2013 (Best Paper Award)
- Shaikh, Aamir Zeb, and Talat Altaf. "Collaborative Spectrum Sensing under Suburban Environments." *International Journal of Advanced Computer Science & Applications* 4 (2013) (Thompson and Reuters Indexed)
- Shaikh, Aamir Z., and Talat Altaf. "Performance Analysis of Correlated Multiple Antenna Spectrum Sensing Cognitive Radio." *International Journal of Computer Applications* July 2012.
- **Grants/ ICT R&D National Grassroots**
- Machine Learning Based Ticket Reservation System
- IoT Based Smart Car Collision Avoidance System
- IoT Based Smart Parking System from ICT R&D National Grassroots
- Implementation of Channel Coding Algorithms for Software Defined Radio Applications from ICT R&D National Grassroots
- Autonomous Car with GPS Navigation and Collision Avoidance from ICT R&D National Grassroots

COMMITTEE WORK

- Team Leader, Outcome Based Education Team, Telecommunication Engineering Programme at NED UET, Karachi
- Member Board of Studies, Department of Telecommunications Engineering, NED University
- Member, Board of Faculties, Electrical and Computer Engineering, NED UET
- Member Curriculum PhD Proposal Presentation Committee, Telecommunications Engg. (TCD) , NED University
- Member Admission Committee Master of Engineering, TCD, NED University
- Member Admission Committee Master of Engineering, TCD, NED University
- Arranged workshops and training sessions for Electronics and Telecommunications Engineering Faculty at NED University of Engg. & Technology, Karachi
- Member, Faculty ECE, University Advancement and Financial Assistance. Prepared required inputs for the Committee regarding ECE faculty
- Examiner, Final Year Project Committee at Telecommunications Engg. Dept. at NED University, Karachi
- Prepared comprehensive Report and Presentation for accreditation of Telecommunications Engineering Program of NED University from Pakistan Engineering Council in 2009, 2018, 2020
- Departmental Representative of Telecommunications Engineering into Duty Society which looks after academic, scholarships and benevolence of students (2007 to 2019)

- Prepared significant inputs for recommendations into Curriculum of Higher Education Commission Pakistan, working under chairman Electrical Engineering Department (2004-2005)

TEACHING EXPERIENCE

Satellite Communications, Wireless/Mobile Communications, Navigational Aids and Radar Systems, Digital Communication & Information Theory, Digital Signal Processing, Electromagnetic Fields, Electronics, Electrical Machines, Matlab and Multisim, Signals and Systems, Probability and Random Processes.

TECHNICAL SKILLS

- Language & Analytic Skills : **IELTS** Band 6.5, **NTS** 61
- Programming Languages : C/C++, Java, Visual Basic,
- Tools : Matlab, Simulink, Multisim, Orcad, 80x86 Assembly.
- Operating System : UNIX, Windows 98/NT/2000/XP

AWARDS/ACTIVITIES

- PhD Scholarship from HEC, Pakistan
- Best Paper Award at IC4 Pakistan
- Gold Medal and Merit Certificate on securing First Position in HSC by Sukkur Board.
- Merit Certificate on designing a Multimedia Software at Science Fair 2000 By NED University.
- Chief Editor of NED University Campus Magazine, The Friend.
- Organizer of Tree Plantation Campaign 2000 at NED University.
- Organizer of Science Fair 2000 at NED University.

Professional Activity

- Associate Editor, International Journal of Ultra Wideband Communications and Systems, Inderscience
- Associate Editor, International Journal of Computing and Digital Systems
- Reviewer, IEEE Wireless Communications
- Reviewer, IEEE Network Magazine
- Reviewer, International Journal of Computing and Digital Systems
- Reviewer, Journal of Sensors
- Reviewer, Emerging Telecommunications Technologies
- Reviewer, IEEE International Symposium on Personal, Indoor and Mobile Radio Communication
- Review Editor, Aerial and Space Networks (specialty section of Frontiers in Space Technologies).
- Reviewer, IET Third Smart City Symposium, Bahrain, FEMRC-UOB'20, IEEC, ICETTEE 2018, IEEE Conferences, ICAIBDA 2021,

MEMBERSHIPS

- Permanent Member, Pakistan Engineering Council. Pakistan.
- Student Member, Institute of Electrical and Electronic Engineers, USA
- Student Member, Institute of Electrical Engineers, UK

REFERENCES

- Dr. Lakshman Tamil,
Professor, Department of Electrical Engg.
The Erik Jhonsson School of Electrical
Engg and Computer Science,
The University of Texas at Dallas, Texas,
USA

- Dr. Shoaib Hasan Zaidi,
Professor, Dept. of Electrical Engg.
Usman Institute of Technology, Karachi.
Pakistan