

Aamir Zeb Shaikh

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

Phone: 02199261261(2671)

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 – Present

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)

JOURNAL PUBLICATIONS

- [J21] Zaidi, Syed Mohammad Abbas, **Aamir Zeb Shaikh**, and Asad Arfeen. "Communication mode selection and game theoretic bandwidth sharing model for D2D relay communication." (2023).
- [J20] 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." *algorithms* 11, no. 2 (2020).
- [J19] 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." *International Journal of Advanced Computer Science and Applications* 11, no. 2 (2020).
- [J18] Rasheed, Haadia, **Aamir Zeb Shaikh**, Shabbar Naqvi, Sarah Salim, Rubab Farooq, Sania Fatima, and Talat Altaf. "Design and Working of a Vending Machine for Pre-Hospital Cardiac Aid in Pakistan." *IJCSNS* 20, no. 2 (2020).
- [J17] 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
- [J16] Khan, Muneeb Aalam, **Aamir Zeb Shaikh**, Shabbar Naqvi, Saima Khadim, and Talat Altaf. "Deep Learning Enabled Spectrum Sensing Radio for Opportunistic Usage." *IJCSNS* 19, no. 11 (2019): 179.
- [J15] 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.
- [J14] Khadim, Saima, Adnan Waqar, **Aamir Zeb**, Imran Khan, and Izhar Hussain. "Smart Cognitive Cellular Network." *Int. J. Future Gener. Commun. Netw* 10, no. 12 (2017): 23-34.
- [J13] Waqar, Adnan, Saima Khadim, **Aamir Zeb Shaikh**, Samreen Aamir, and Imran Khan "A Survey on Cognitive Radio Network using Artificial Neural Network." *International Journal of Future Generation Communication and Networking* 10.11 (2017): 11-18.

- [J12] Ahmed, Syed Nauman, **Aamir Zeb Shaikh**, Shabbar Naqvi, and Talat Altaf. "Impact of Cloud Attenuation on Ka-Band Satellite Links in Karachi, Pakistan." J. Appl. Environ. Biol. Sciences 7.10 (2017): 71-77.
- [J11] Khan, Ammar Ahmed, **Aamir Zeb Shaikh**, Shabbar Naqvi, and Talat Altaf "A Novel Cognitive Radio Enabled IoT System for Smart Irrigation." Journal of Informatics and Mathematical Sciences 9.1 (2017): 129-136.
- [J10] **Shaikh, Aamir Zeb**, Syed Nauman Ahmed, 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 7, no. 7(7)119-125, 2017
- [J09] Irfan, Fizza, **Aamir Zeb Shaikh**, Shabbar Naqvi, and Talat Altaf. "Performance Analysis of Improved Energy Detector under Noise Uncertainty." J. Appl. Environ. Biol. Sci 7, no. 9 (2017): 89-94.
- [J08] Najam, Syed Shahram, **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 4, no. 8 (2017): 133-138.
- [J07] Najam Syed, Shahram, **Aamir Zeb Shaikh**, and Shabbar Naqvi. "A Novel Hybrid Biometric Electronic Voting System: Integrating Finger Print and Face Recognition." arXiv e-prints (2018): arXiv-1801.
- [J06] Ayesha Hassan, **Aamir Zeb Shaikh**, Maham Majid Mehwish Jawed and Momina Iftikhar, "GNSS based Smart Vehicle Security System" Balochistan Journal of engineering and Applied Sciences, Vol. 11, Issue 1, 2018.
- [J05] 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 and Applications 7, no. 12 (2016).
- [J04] **Shaikh, Aamir Zeb**, and Lakshman Tamil. "Cognitive Radio Enabled Telemedicine System." Wireless Personal Communications 83, no. 1 (2015): 765-778.
- [J03] **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)
- [J02] **Shaikh, Aamir Zeb**, and Talat Altaf. "Collaborative Spectrum Sensing under Suburban Environments." International Journal of Advanced Computer

- [J01] **Shaikh, Aamir Z.**, and Talat Altaf. "Performance analysis of correlated multiple antenna spectrum sensing cognitive radio." *International Journal of Computer Applications* 50, no. 5 (2012).

CONFERENCE PUBLICATIONS

- [C11] Naqvi, S., **Shaikh, A.Z.**, Altaf, T., Singh, S. (2021). Fuzzy Logic Enabled Stress Detection Using Physiological Signals. In: Miraz, M.H., Southall, G., Ali, M., Ware, A., Soomro, S. (eds) *Emerging Technologies in Computing. iCETiC 2021. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, vol 395. Springer, Cham. https://doi.org/10.1007/978-3-030-90016-8_11
- [C10] Ahmed, S., **Shaikh, A.Z.**, Ahmed, A. (2018). Survey on Fuzzy Logic Enabled Cognitive Radios. In: Miraz, M., Excell, P., Ware, A., Soomro, S., Ali, M. (eds) *Emerging Technologies in Computing. iCETiC 2018. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, vol 200. Springer, Cham. https://doi.org/10.1007/978-3-319-95450-9_16
- [C09] Naqvi, S.A.R., **Shaikh, A.Z.**, Khatri, K.L., Mugheri, A.A., Ahmed, S. (2018). Adaptive Threshold Technique for Spectrum Sensing Cognitive Radios Under Gaussian Channel Estimation Errors. In: Miraz, M., Excell, P., Ware, A., Soomro, S., Ali, M. (eds) *Emerging Technologies in Computing. iCETiC 2018. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, vol 200. Springer, Cham. https://doi.org/10.1007/978-3-319-95450-9_15
- [C08] 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
- [C07] Altaf Ahmed and **Aamir Zeb Shaikh** et al. Performance Improvement Techniques for Free Space Optical Communications”. *International Conference on Emerging Trends in Telecommunications and electronic Engineering*. 27-28. February 2018
- [C06] S M Abbas Zaidi, **Aamir Zeb Shaikh** , Shabbir ahmed and Altaf Ahmed, “ Cognitive Radio assisted Device to Device communicationbs” *International Conference on Emerging Trends in Telecommunications and electronic Engineering*. 27-28. February 2018
- [C05] Syed Shahram Najam and **Aamir Zeb Shaikh**” Green House Monitoring and Automation System” *International Conference on Innovations in Computer Scienceand Software*

Engineering 2016

- [C04] Syed Nauman Ahmed and **Aamir Zeb Shaikh**,” Impact of elevation Angle on Rainattenuation in Satellite Communications” First International Conference on electrical Engineering Congress (IEEC) 2016
- [C03] Ammar ahmed Khan and **Aamir Zeb Shaikh**, “ Design and Implementaion of Gateway for Wireless Sensor Networks: Zigbee and Bluetooth”, IEEP Multitopic Symposium, Karachi. March 25-26 2015
- [C02] **Aamir Zeb Shaikh** and Talat Altaf, “ Analysis of Mobility Driven Spectrum Sensing Ciognitive Radio under Suburban Environments” Proceedings of IMTIC 2015
- [C01] Muhammad Imran Aslam, **Aamir Zeb Shaikh**, “Joimnt and Marginal Probabilities for Time of Arrival and Angle of Arrival using Ellipsoidal Model”, Computer, Control and Communication (IC4). 3rd International Conference on Vol no. pp.1,5, September 2013 (**Best Paper Award**)

COMMITTEE WORK

- Member Outcome Based Education Team, Telecommunication Engineering Programme at NED UET
- Member, Faculty ECE, University Advancement and Financial Assistance
- Prepared comprehensive Report and Presentation for accreditation of Telecommunications Engineering Program of NED University from Pakistan Engineering Council in 2009
- Departmental Representative of Telecommunications Engineering into Duty Society which looks after academic, scholarships and benevolence of students (2007 till date)
- 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 Multisimm, 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, Multisimm, Orcad, 80x86 Assembly.
- Operating System : UNIX, Windows 98/NT/2000/XP

AWARDS/ACTIVITIES

- 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.

MEMBERSHIPS

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

REFERENCES

- Will be provided upon request.