Dr. Engr. MUHAMMAD SAJJAD KHAN

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Experience

1. Assistant Professor, FET, IIUI Since 6th June 2011.
2. Research Scholar, MCS Lab UOU S.Korea, 2012- 2016.
3. Assistant Professor, NFC IET Multan. Sep 2008 - June 2011.
4. System Engineer (Lec.) NFC IET Multan, June 2006- Aug 2008.
5. Deputy Director, CPI Chakdara May 2004 - June 2006

Professional Education

1. Ph.D. (Electrical Engineering) University of Ulsan, S. Korea (2016).
2. Master of Engineering (Telecom & Control), MUET, Jamshoro, Pakistan (2007).
3. PGD (Post Graduate Diploma) in Human Resource Management, BZU Multan, Pakistan (2011).
4. B.Sc. Engineering (Computer Information Systems), UET Peshawar, Pakistan (2004).

Honors & Awards

1. Ulsan International Graduate Scholarship (for Ph.D. University of Ulsan S. Korea).
2. Got Merit Scholarship in UET Peshawar.
3. Got 10th Position in Board in HSSC.
4. Got 2nd Position in SSC in School.

Reviewer

1. KSII Transaction on Internet and Information Systems (TIIS).
2. International Conference on Electrical & Electronic Engineering, 4-6 Nov. 2015, Bangladesh. (ICEEE 2015).

Publications	Title/Journal/Year

Journals:

1. **Muhammad Sajjad Khan**, Insoo Koo, *"Performance Analysis of Amplify and Forward (AF) Based Cooperative Spectrum Sensing in Cognitive Radio Network",* Journal of Information and communication convergence engineering (JICCE), Vol.11, No.4, pp.223-228, Dec. 2013.

2. **Muhammad Sajjad Khan,** Insoo Koo, " *An Enhanced Cooperative Spectrum Sensing based on New rule of Combining Evidences in Cognitive Radio*," Lecture Notes in Electrical Engineering, UCAWS, Springer, Vol. 331, Book ISBN:978-94-017-9617-0, 2015.

3. **Muhammad Sajjad Khan,** Insoo Koo, "The *Effect of Multiple energy detector on Evidence theory based Cooperative Spectrum Sensing for Cognitive Radio Networks*," Journal of Information Processing Systems, Vol.11, No.3, pp.1-15.doi: 10.3745/JIPS.03.0040, Dec.2015.

4. **Muhammad Sajjad Khan,** Insoo Koo, "Mitigation of Adverse Effects of *Malicious Users on Cooperative Spectrum Sensing by Using Hausdorff Distance in Cognitive Radio Networks,*" Journal of Information and Communication Convergence Engineering (JICCE), Vol.13, No.2, pp.74-80,June 2015.

5. Muhammad Usman, **Muhammad Sajjad Khan**, Vu-Van Hiep, Insoo Koo, *"Energy-Efficient Channel Handoff for Sensor network-Assisted Energy Harvesting Cognitive Radio Network,"* Journal of Sensor Network, *15*(8), 18012-18039; doi:10.3390/s150818012, August 2015. (IF 2.245)

6. **Muhammad Sajjad Khan**, Muhammad Usman, Vu-Van Hiep, Insoo Koo, *"Efficient Selection of Users' pair in Cognitive Radio Network to Maximize Throughput using Simultaneous Transmit-Sense Approach," IEICE Transaction on Communication, DOI: 10.1587 transcom. 2016EBP3067, Sep, 2016.*

7. **Muhammad Sajjad Khan,** Muhammad Usman, Insoo Koo, " Dynamic Spectrum Tracking through Quickest Detection Technique: A Clustered Approach," (under-review Journal of Internet Technology)

8. **Muhammad Sajjad Khan**, Muhammad Usman, Sheraz Ali Khan, Hurmat Ali Shah, *"A Sequential Cooperative Sensing Based on Multiple Energy Detectors for Cognitive Radio Networks,". (to be submitted).*

9. Md. Tahidul Islam, **Muhammad Sajjad Khan**, Insoo Koo, *" Multi Antenna Assisted Coarse Fine Sensing Scheme for Wideband Cognitive Radio Communication,"(Submitted to IETE).*

10. Noor Gul, I. M. Qureshi, A. Naveed, A. Umar, **Muhammad Sajjad Khan**, Atif Elahi, *" Malicious Users Prevention in a Hard Fusion Scheme using Statistical Features in Cooperative Spectrum Sensing,"(Submitted to IETE).*

11. Noor Gul, I. M. Qureshi, A. Umar, **Muhammad Sajjad Khan**, *" History Based Forward and Feedback Mechanism in Cooperative Spectrum Sensing Including Malicious Users in Cognitive Radio Networks,"(Submitted to KSII Transaction on Internet and Information Systems).*

12. Noor Gul, I. M. Qureshi, A. Umar, A. Elahi, T. S. Khattak, **Muhammad Sajjad Khan**, *" Cooperative Spectrum Sensing Using Optimal Hard Decision in in the Presence of Abnormalities in Cooperative Spectrum,"(Submitted to IETE Journal).*

Conferences:

13. **Muhammad Sajjad Khan**, Insoo Koo, " *An Evidence Theory-based Cooperative Sensing for Cognitive Radio using Multiple Energy Detector*," 2nd FTRA International Conference on Ubiquitous Computing application and Wireless Sensor Network (UCAWSN-14), p21, 7-10 July 2014.

14. Muhammad Usman, **M. Sajjad Khan**, and Insoo Koo, *"A Robust Cooperative Spectrum Sensing Based on Non-uniform Reliability for Cognitive Radio Networks",* ISAAC 2013/ICACT2013, AACL 01, PP.93-96, 2013.

15. Md. Tahidul Islam, **Muhammad Sajjad Khan**, Insoo Koo, *"SIMO-Based Coarse Fine Sensing Scheme for Wideband Cognitive Radio Communication,"* International Conference on Electrical & Electronics Engineering (ICEEE'2015), Nov.2015 .

16. Md. Tahidul Islam, **Muhammad Sajjad Khan**, Insoo Koo, *"Evidence Theory-Based Cooperative Spectrum Sensing in Multi Antenna Cognitive Radio System,"* IEEE 2nd International Conference on Electrical Information and Communication Technology (EICT'2015), pp. 278-283, Dec. 2015.

17. **Muhammad Sajjad Khan**, Muhammad Usman, Insoo Koo, "Quickest Detection of Primary Signal in Cognitive Radio Network: A Clustered Approach," The 2016 World Congress on Information Technology Application and Services, World IT Congress 2016 Jeju, 17-19 Feb. 2016.

18. **Muhammad Sajjad Khan**, Arif Ur Rahman, Insoo Koo, "Primary User Detection in Cognitive Radio Network Through Quickest Detection," (submitted to C-CODE. 2017).

19. **Muhammad Sajjad Khan**, M. Usman, and Insoo Koo, "*Cognitive User Selection Based on Throughput Estimation in Cognitive Radio Network*," 2017. (To be submitted).

References: will be provided on request.