**Kayhan Zrar Ghafoor (Post doc Fellow)**

Kayhan Zrar Ghafoor (PhD),

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A.Profile: https://scholar.google.com.my/citations?user=L0LekN0AAAAJ

May 10, 2019

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| **Basic Information**  |
| * Date of Birth: 06 January, 1982
* Gender: Male
* Current Employment: Postdoctoral Fellow at Shanghai Jiao Tong University/ School of Electronic, Information and Electrical Engineering
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| **Research Interest** |
| Computer Networks, Vehicular & Mobile Ad Hoc Networks, Software Defined Network, mmWave communication |
| **Language Proficiency**  |
| * Kurdish: Native Language
* English: Fluent
* Arabic: Very Good
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| **Professional Membership** |
| * IEEE Vehicular Technology Society.
* IEEE Communications Society.
* Internet Technical Committee (ITC).
* International Association of Engineers (IAENG).
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| **(i) Academic Education** |
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| **(a) Summary:** |
| * PhD in the field of vehicular ad hoc networks, Geographical Routing, and Adaptive Beaconing from Faculty of Computing, Universiti Teknologi Malaysia, 2009-2012.
* Master of Computer Science by mixed mode (research and course work) specializes in Designing and Implementation of Remote Monitoring System from Faculty of Engineering, Koya University, Koya, Kurdistan, Iraq in 2006.
* Bachelor of Electrical Engineering major in Communication and Power Engineering from University of Salahaddin, Erbil, Kurdistan, Iraq in 2003.
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| **(b) Detail:** |
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| **PhD (Computer Science)** |
| **University/College** | **Country** | **From/To** | **Years Completed** | **Grade/Division** |
| Universiti Teknologi Malaysia | Malaysia | 2009-2012 | 3 | Ranked 1st over 98 PhD Students**(got Vice-Chancellor Award)** |
|  |  |  |  |  |
| **Master of Science (Computer Science)** |
| **University/College** | **Country** | **From/To** | **Years Completed** | **Grade/Division** |
| Koya University | Iraq | 2004-2006 | 2 | Cum GPA 3.0 |
|  |  |  |  |  |
| **Bachelor of Science (Electrical Engineering)** |
| **University/College** | **Country** | **From/To** | **Years Completed** | **Grade/Division** |
| University of Salahaddin-Erbil | Iraq | 1999-2003 | 4 | Ranked 5th over 25 Students |
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| **(ii) Work Experience** |
| **Position** | **Organization** | **Dates** | **Type** |
| Post doctorate Fellow | Shanghai Jiao Tong University, China | 16 December, 2017 to Present | Full-time |
| **Description:** Tasks and responsibilities are1. Conducting cutting-edge research in the fields of vehicular ad hoc networks, mmWave communication and 5G
2. Developing protocols and carryout simulation using NS3 and IEEE 802.11ad.
3. Publishing in A level journals and conferences.
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| **Position** | **Organization** | **Dates** | **Type** |
| Control & Automation Engineer | Air Temp Inc., Canada  | 7 October,2016 to 10 Feb.,2017 | Full-time |
| **Description:** Tasks and responsibilities are1. Control & Automation Engineer/ Air Temp Inc., Montreal, Canada. Tasks are configuring industrial networks for remote monitoring and control, SCADA system and computer based device configuration.
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| **Position** | **Organization** | **Dates** | **Type** |
| Lecturer | Salahaddin University-Erbil | 1 July 2015 to 1 July,2016 | Full-time |
| **Description:** I was worked as full-time lecturer in the College of Engineering of the Salahaddin University-Erbil. I taught the following subject:1. Data Structure with Java: In this subject, I taught many types of data structure such as Stack, Queue, Linked List, Double Linked List, Tree, types of sorting, Graph. The aforementioned data structures were coded using Java.

The tasks and responsibility:1. I was worked as head of quality assurance at the department of software eng.
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| **Position** | **Organization** | **Dates** | **Type** |
| Lecturer | Hayat Private University for Science and Technology | 1 January 2013 to 1 January,2014 | Part-time |
| **Description:** I worked as part-time lecturer in the College of Science of the Hayat University for Science and Technology. I taught the following 5 subjects:1. Computer Architecture and Microprocessor
2. Numerical Analysis with Matlab
3. Data Communication & Networking
4. Computer Applications
5. Academic Debate
6. Matlab Programming
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| **Position** | **Organization** | **Dates** | **Type** |
| Visiting Researcher  | University Technology Malaysia | 01 Janu. 2012 to 01 May 2012 | Full-time |
| **Description:** I appointed as a visiting researcher in University Technology Malaysia for four months. My duties as a visiting researcher are listed below: 1. Conducting research in the vehicular network area of study.
2. Giving lecture in the faculty of computing no more than 6 hours per week.
3. Conducting seminars in the field of wireless networks.
4. Publication of research papers in high impact factor journals and reputed international conferences.
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| **Position** | **Organization**  | **Dates** | **Type** |
| Lecturer | Koya University | 18 Sept 2006 to 30 June, 2015 | Full-time |
| **Description:** I worked as Full-time lecturer in the College of Engineering of the Koya University. I taught the following 6 subjects:1. Digital Logic System subject to 1st years undergraduate students.
2. Digital Logic Design-I subject to 2nd year students.
3. Digital Logic Design-II subject to 3rd year students.
4. Computer Networks subject to 4th year students.
5. Microprocessor Programming.
6. Academic Debate.

In addition, I supervised undergraduate students (2 final year report) in field of wired and wireless networks.The tasks and responsibilities of a full-time lecturer are as follows:1. Lecture based on the syllabus determined by the faculty.2. Assign coursework to student and asses the coursework.3. Perform other tasks required by the University or Faculty as instructed. |
| **Position** | **Organization**  | **Dates** | **Type** |
| Lecturer | Soran University | 01 Sep 2007 to 1 Dec 2008 | Part-time |
| **Description:**  I worked as part-time lecturer in the College of Education of the Soran University. I taught the following subject:1. Computer Architecture & Microprocessor

The tasks and responsibilities of a part-time lecturer are as follows:1. Lecture based on the syllabus determined by the faculty.
2. Assign coursework to student and asses the coursework.
3. Prepare examination, test, and quiz question, and asses the answer script.
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| **Position** | **Organization** | **Dates** | **Type** |
| Electrical Engineer | General Directory of Electricity | 01 Nov 2003 to 25 March 2004 | Full-time |
| **Description:** I worked in general directory of electricity as an electrical engineer. I have been involved in the supervision of many electrical projects such as construction of low voltage distribution systems, technical support for low voltage distribution systems and installing low voltage step-down transformers. |
| **(iii) Publications** |
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| **(a) International Journals** |
| 1. **Ghafoor, K. Z.,** Linghe Kong. [Danda B. Rawat](https://ieeexplore.ieee.org/search/searchresult.jsp?searchWithin=%22First%20Name%22:%22Danda%20B.%22&searchWithin=%22Last%20Name%22:%22Rawat%22&newsearch=true&sortType=newest),Eghbal Hosseini, [Ali Safaa Sadiq](https://ieeexplore.ieee.org/search/searchresult.jsp?searchWithin=%22First%20Name%22:%22Ali%20Safaa%22&searchWithin=%22Last%20Name%22:%22Sadiq%22&newsearch=true&sortType=newest). (2019). Quality of Service Aware Routing Protocol in Software-Deﬁned Internet of Vehicles. IEEE Journal of Internet of Things. Vol. 6 (2). P.P. 2817-2828.
2. **Ghafoor, K. Z.**, Linghe Kong, Ali Saffa Sadiq, Shearali Zeadally, Danda B. Rawat. (2018). Vehicular mmWave Communication-with a Focus on MAC and PHY Layer. IEEE Transactions on Intelligent Transportation Systems. Under review.
3. **Ghafoor, K. Z.**, Mohsen Guizane, Linghe Kong, Halgurd S. Maghdid. (2019). Enabling Efficient Coexistence of C-V2X and DSRC. IEEE Wireless Communication Magazine. Under review.
4. Linghe Kong, Guangtao Xue, **Ghafoor, K. Z.,** Rasheed Hussain, Hao Sheng. (2018). Real-Time Density Detection in Connected Vehicles. IEEE Communication Magazine. Volume: 56, Issue: 10.
5. Linsheng Ye, Linghe Kong,  **Ghafoor, K. Z.**, Guihai Chen, and Mumtaz Shahid. (2018). LAB: Lightweight Adaptive Broadcast Control in DSRC Vehicular Networks. International Journal of Wireless Communications and Mobile Computing. Accepted, August, 05, 2018.
6. SA Maghdid, HS Maghdid, SR Hma Salah,  **Ghafoor, K. Z.**, AS Sadiq, S Khan. (2018). Indoor human tracking mechanism using integrated onboard smartphones Wi-Fi device and inertial sensors. Telecommunication Systems, pp. 1-12.
7. Ali Safaa Sadiq, Basem Alkazemi, Seyedali Mirjalili, A. Noraziah, Suleman Khan, Ihsan Ali, Al-Sakib Khan Pathan,  **Ghafoor, K. Z.** . (2018). An Efficient IDS Using Hybrid Magnetic Swarm Optimization in WANETs. IEEE Access Journal. 10.1109/ACCESS.2018.2835166.Doi Number.
8. Muhammad Kamran Khan, Muhammad Shiraz, **Ghafoor, K. Z.,** Suleman Khan, Ali Safaa Sadiq, and Ghufran Ahmed. (2018). EE-MRP: Energy-Efficient Multistage Routing Protocol for Wireless Sensor Networks. International Journal of Wireless Communications & Mobile Computing. Volume 2018, Article ID 6839671.
9. Ali Safaa Sadiq, Suleman Khan, **Ghafoor, K. Z**., Mohsen Guizani, Seyedali Mirjalili. (2018). Transmission power adaption scheme for improving IoV awareness exploiting: evaluation weighted matrix based on piggybacked information. International Journal of Computer Networks. <https://doi.org/10.1016/j.comnet.2018.03.019>.
10. Adebanjo Adekiigbe, Abdulghani Ali Ahmed, Ali Safaa Sadiq, **Ghafoor, K. Z.,** Kamalrulnizam Abu-Bakar (2017). An Efficient Cluster Head Election Algorithm for Client Mesh Network using Fuzzy Logic Control. Joutnal of Information Technology.  [Vol 18, No 5 (2017)](http://jit.ndhu.edu.tw/ojs/index.php/jit/issue/view/119).
11. Zouina Doukha, **Ghafoor, K. Z.,** Sofiane Ali Ben Mussa, Samira  Moussaoui, Iman  Loumachi. (2017). Load Balancing Aware SDMA-based Beaconing Approach in Vehicular Ad Hoc Networks. Journal of Annals of Telecommunications Accepted. April 2017, Volume 72, [Issue 3](https://link.springer.com/journal/12243/72/3/page/1), pp 189–197. Impact Factor (0.722) .
12. **Ghafoor K.Z.** (2016), [Video Streaming over Vehicular Ad Hoc Networks: A Comparative Study and Future Perspectives](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=L0LekN0AAAAJ&cstart=20&citation_for_view=L0LekN0AAAAJ:sbeIDTyQOFgC), ARO-THE SCIENTIFIC JOURNAL Vol. 4 (2), pp 25-36.
13. Sandra Sendra, Jaime Lloret, Jose M. Jimenez, **Ghafoor, K. Z.** (2016). Underwater Ad Hoc Wireless Communication for Video Delivery. International Journal of Wireless Personal Communications. Accepted. DOI. 10.1007/s11277-016-3732-8. Volume 80, Issue 2, p.p. 785-804. Impact Factor (0.979).
14. Halgurd S. Maghdid, [Ihsan Alshahib Lami](http://dl.acm.org/author_page.cfm?id=81552539656&coll=DL&dl=ACM&trk=0&cfid=761181964&cftoken=51374005)**, Ghafoor, K. Z**., [Jaime Lloret](http://dl.acm.org/author_page.cfm?id=81340491147&coll=DL&dl=ACM&trk=0&cfid=761181964&cftoken=51374005) (2016)**.** Seamless Outdoors-Indoors Localization Solutions on Smartphones: Implementation and Challenges**.** Journal ACM Computing Surveys. Vol. 48, Issue 4. Impact Factor (3.373).
15. Chih-Heng Ke, Chong-Yi Yang, Jiann-Liang Chen,   **Ghafoor, K. Z.**, Jaime Lloret. (2015). ​ Frame-based Mapping Mechanism for Energy-Efficient MPEG-4 Video Transmission over IEEE 802.11e Networks with Better Quality of Delivery. Journal of Network and Computer Applications. (10.1016/j.jnca.2015.08.005) Accepted.  Impact Factor (1).
16. Ihab A Najm, Mahmod Ismail,  **Ghafoor, K. Z.**, B B Zaidan, Abd Al-razak T Rahem. (2015).  Improvement of SCTP Congestion Control in the LTE-A Network, Journal of Network and Computer Applications, Accepted. Impact Factor (1).
17. Zhenar Faeq, **Ghafoor, K. Z.**, Bawar Abid, Omar Al-Rassam. Exploiting Twitter in Market Research for University Degree Courses. (2015). International Journal on Integrating Technology in Education. Accepted.
18. Ali Safaa Sadiq, Norsheila Binti Fisal, **Ghafoor, K. Z.**, Jaime Lloret (2015). An Adaptive Handover Prediction Scheme for Seamless Mobility Based Wireless Networks, Scientiﬁc World Journal. Volume 2014. Article ID 610652, pp. 1—17. (Scopus Cited Publication).
19. Ali Safa Sadiq, Norsheila Binti Fisal, **Ghafoor, K. Z.**, Jaime Lloret (2015). Advanced Mobility Handover for Mobile IPv6 based Wireless Networks. Scientiﬁc World Journal. Volume 2014. Article ID 610652, pp. 1—17. (Scopus Cited Publication).
20. **Ghafoor, K. Z.,** Jaime Lloret. Marwan Aziz Mohammed. Ali Safa Sadiq. (2014). Improved Geographical Routing in Vehicular Ad Hoc Networks. International Journal of Wireless Personal Communications. Accepted. DOI. 10.1007/s11277-014-2041-3. Volume 80, [Issue 2](http://link.springer.com/journal/11277/80/2/page/1), p.p. 785-804. Impact Factor (0.979).
21. **Ghafoor, K. Z.,** Marwan Aziz Mohammed· Jaime Lloret . Abu Bakar K., Zaitul M. Zainuddin (2014). Routing Protocols in Vehicular Ad hoc Networks: Survey and Research Challenges. International Journal of Network Protocols and Algorithms. Vol.5(4), 39 – 83.(ProQuest Cited Publication).
22. Ali Safa Sadiq, Kamalrulnizam Abu Bakar, **Ghafoor, K. Z.,** and Jaime Lloret (2014). An Intelligent Vertical Handover Scheme for Audio and Video Streaming in Heterogeneous Vehicular Networks. Journal of Mobile Networks and Applications. Accepted. Impact Factor (1.469).
23. Sergio Machado, Javier Oz´on, Alberto J. Gonz´alez, and Ghafoor**, K. Z** (2014). Structured Peer-to-Peer Real Time Video Transmission over Vehicular Ad Hoc Networks. Journal of Mobile Networks and Applications. Accepted. Impact Factor (1.469).
24. Rashid Hafeez Khokhar, Tanveer Zia, **Ghafoor, K. Z.,** and Jaime Lloret (2013). Realistic and Efficient Radio Propagation Model for V2X Communications. KSII TRANSACTIONS ON INTERNET AND INFORMATION SYSTEMS. Manuscript ID TIIS-RP-2013-May-0372. Accepted. Impact Factor (0.345).
25. **Ghafoor, K. Z.,** Jaime Lloret · Abu Bakar K. Ali Safa Sadiq · Sofian Ali Ben Mussa (2013). Beaconing Approaches in Vehicular Ad Hoc Networks: A Survey. International Journal of Wireless Personal Communications. 70(4), 1 – 30. Volume 73, [Issue 3](http://link.springer.com/journal/11277/73/3/page/1), p.p. 885-912. Impact Factor (0.979).
26. **Ghafoor, K. Z.,** Abu Bakar, K., Van Eenennaam, E., Khokhar, R. H. and Gonzalez,A. J. (2011). A Fuzzy Logic Approach to Beaconing for Vehicular Ad hoc Networks. International Journal of Telecommunication Systems. Vol.52, Issue 1, pp. 139-149. SpringerLink. Impact Factor (1.163).
27. Khokhar, R. H., Ngadi, M. A., Latiff, M. S., **Ghafoor, K. Z.** and Amin, M. A. (2011). Multi-Criteria based Self-Election Scheme with Guaranteed Delivery in VANETs. International Journal of Computers, Communications and Control, Vol.7, No. 5 , pp. 203-217. Agora University Editing House. Impact Factor ( 0.441).
28. Mahboubeh Afzali, Kamalrulnizam Abu Bakar, **Ghafoor, K. Z.,** Jaime Lloret, Amir Karamoozian. (2013). Improving the communication path reliability of WiMAX mesh network using multi sponsor technique. International Journal of Telecommunication Systems, Accepted. SpringerLink. Impact Factor (1.163).
29. A. S. Sadiq, Kamalrulnizam Abu Bakar, **Ghafoor, K. Z.,** Jaime Lloret and Tara Ali-Yahiya. FUZZY LOGIC-ASSISTED ADVANCED PREDICTIVE HANDOVER FOR MOBILE IPV6 BASED WIRELESS NETWORKS. International Journal of Innovative Computing Information and Control. Accepted. Impact Factor (2.923).
30. Anesa Maolod Omar Al-Najeh, Kamalrulnizam Abu Bakar , Ali Safa Sadiq, and **Ghafoor, K. Z.** ( 2012). Adaptive Packet Buffering Algorithm Based on Priority and Traffic Throughput for Reducing Packet Loss in Fast Handover for Mobile IPv6. International Journal of Computer Science Issues. Volume 9, Issue 4. Indexed Journal.
31. Aos Anas Mulahuwaish , Abu Bakar, K. and **Ghafoor, K. Z.** (2012). A Congestion Avoidance Approach in Jumbo Frame-enabled IP Network. International Journal of Advanced Computer Science and Applications. Vol. 3, No. 1. Indexed Journal.
32. **Ghafoor, K. Z.,** K. Abu Bakar, S. Salleh, K. Lee, M. Mohamad, M. Kamat and M. Arshad. (2012). Fuzzy Logic-Assisted Geographical Routing over Vehicular Ad hoc Networks. International Journal of Innovative Computing Information and Control. Vol (8), Number 7(B). Impact Factor (2.923).
33. **Ghafoor, K. Z.,** Abu Bakar, K., Zainuddin, Z. M., Ke, C.-H. and Gonzalez, A. J. (2012). Reliable Video Geocasting over Vehicular Ad Hoc Networks. International Journal of Ad Hoc and Sensor Wireless Networks, Old City Publishing. Vol. (15), Number 2-4, p. 201-221. Impact Factor (0.478).
34. **Ghafoor, K. Z.,** Abu Bakar, K., Jaime Lloret, Khokhar, R. H.and Lee, K. C. (2013). Intelligent Beaconless Geographical Routing for Urban Vehicular Environments. International Journal of Wireless Networks, Vol. (19), pp. 345-362, Impact Factor ( 1.055 ).
35. Sadiq, A., Abu Bakar, K. and **Ghafoor, K. Z.** Jaime Lloret and Seyed Ali Mirjalili (2012). A Smart Handover Prediction System based on Curve Fitting Model for Fast Mobile IPV6 in Wireless Networks. International Journal of Communication Systems, Wiley.DOI: 10.1002/dac.2386. Accepted. Impact Factor (1.106).
36. Khokhar, R. H., Rafidah Md Noor,**Ghafoor, K. Z.,**Ke, C.-H.and Ngadi, M. A.(2011). Fuzzy Assisted Social-based Routing for Urban Vehicular Environments. EURASIP Journal on Wireless Communications and Networking. Hindawi Publishing Corporation. Vol. (178), No. 1. Impact Factor (0.805).
37. **Ghafoor, K. Z.,** Abu Bakar, K., AL-Hashimi, H. N. and Lee, K. C. (2010). A Novel Delay and Reliability aware Inter-Vehicle Routing Protocol. International Journal of Network Protocols and Algorithms. 2(2), pp. 66 -88.Macrothink Institute. (ProQuestCited Publication).
38. Mohsin, A. H., AbuBakar, K., Adekiigbe, A., **Ghafoor K. Z.**(2012).  A Survey of Energy-Aware Routing and MAC Layer Protocols in MANETS: Trends and Challenges. International Journal of Network Protocols and Algorithms. Vol (4), Number (2), p.p. 82-107.Macrothink Institute. (ProQuest Cited Publication).
39. AL-Hashimi, H. N., Abu Bakar, K. and **Ghafoor, K. Z.** (2011). Inter-domain Proxy Mobile IPv6 based Vehicular Network. International Journal of Network Protocols and Algorithms. 2(4), 1 – 15. Macrothink Institute. (ProQuest Cited Publication).
40. Sadiq, A., Abu Bakar, K. and **Ghafoor, K. Z.** (2011). A Fuzzy Logic Approach for Reducing Handover Latency in Wireless Networks. International Journal of Network Protocols and Algorithms. 2(4), 61 – 87. Macrothink Institute. (ProQuestCited Publication).
41. **Ghafoor, K. Z.** (2007), [Application of Fuzzy Inference to Scheduling Non-Preemptive Periodic Tasks](http://teknologimalaysia.academia.edu/KayhanZrarGhafoor/Papers/398094/Application_of_Fuzzy_Inference_to_Scheduling_Non-Preemptive_Periodic_Tasks). Journal of Pure and Applied Sciences. 67(1), 200-208. University of Salahaddin. (Non ISI/ Non Scopus Cited Publication).
42. Rastee, D. A. and **Ghafoor, K. Z.** (2009). [Fuzzy Logic Modeling of the Effect of Turning Parameters on Surface Finish of AISI 1035 Carbon Steel](http://teknologimalaysia.academia.edu/KayhanZrarGhafoor/Papers/398089/Fuzzy_Logic_Modelling_of_the_Effect_of_Turning_Parameters_on_Surface_Finish_of_AISI_1035_Carbon_Steel). Journal of Pure and Applied Sciences. 21(4). 160-169. University of Salahaddin. (Non ISI/ Non Scopus Cited Publication).
 |
| **(b) International Conferences** |
| 1. **Ghafoor, K. Z.**, Linghe Kong, Ali Safaa Sadiq, Zouina Doukha, Fuad Mawlood Shareef. (2018). Trust-aware Routing Protocol for Mobile Crowdsensing Environments. IEEE International Conference on Computer Communications INFOCOM2018 (MiSeNet 2018).
2. Sofian Ben Mussa, Mazani Manaf and **Ghafoor, K. Z.** (2015). Simulation Tools for Vehicular Ad Hoc Networks: A Comparison Study and Future Perspectives. In Proceedings of the International Conference on Wireless Networks and Mobile Communications 2015 (WINCOM'15). Accepted. (ISI/SCOPUS Cited Publication).
3. Sofian Ben Mussa, Mazani Manaf and **Ghafoor, K. Z.** (2014). Beaconing and Transmission Range Adaptation Approaches in Vehicular Ad Hoc Networks: Trends & Research Challenges. In Proceedings of International Conference on computational Science and Technology 2014 (ICCST 2014).
4. Sadiq, A., Abu Bakar, K., **Ghafoor, K. Z.,** and Jaime Lloret. (2013). Intelligent Vertical Handover for Heterogeneous Wireless Network. In Proceedings of The World Congress on Engineering and Computer Science. 774-779.
5. **Ghafoor, K. Z.,** Abu Bakar, K., AL-Hashimi, H. N. and Zafar, S. M. (2009). Inter-Vehicle Communication Protocols for Simple Text and Video Communications: A Survey. In Proceedings of the 2009 IEEE International Conference on Antennas, Propagation and Systems. 05–08 December. Johor: IEEE, 104 – 110. (IEEEXploreCited Publication).
6. Alberto Jose Gonzalez, Ramon Martin De Pozuelo, Jesus Alcober, Martin German, Francesc Pinyol and **Ghafoor, K. Z.,**  (2012). Enabling SCI-FI: Service-oriented Context-aware and Intelligent Future Internet”. In Proceedings of the 7th ACM International Conference on Future Internet Technologies. 11-12September. Johor: ACM, 104 – 110. Korea. (ACMCited Publication).
7. **Ghafoor, K. Z.** and Abu Bakar, K. (2010). Inter-Vehicle Communication Protocols for Multimedia Transmission. In Proceedings of the 2010 IAENG International Conference on Communication Systems and Applications. 17–19 March. HongKong: IAENG, 2006 – 2011. (ISI/SCOPUS Cited Publication).
8. Sadiq, A., Abu Bakar, K., **Ghafoor, K. Z.** and Gonzalez, A. J. (2011). Mobility and Signal Strength- Aware Handover Decision in Mobile IP6 based Wireless LAN.In Proceedings of the 2011 IAENG International Conference on Communication Systems and Applications. 16–18 March. Hong Kong: IAENG, 2016 – 2022.(ISI/SCOPUS Cited Publication).
9. **Ghafoor, K. Z.,** Abu Bakar, K. and Gonzalez, A. J. (2010). Error Resilient Aware Video Streaming over Vehicular Ad Hoc Networks. In Proceedings of the 2010International Conference on Postgraduate Education (ICPE-4). 27–29 November. Kuala Lumpur: UKM, 150 – 154.
10. Gonzalez, A. J., de Pozuelo, M. R., **Ghafoor, K. Z.,** Pinyol, F. and Alcober, J.(2011). Context-aware Multimedia Service Composition Using Quality Assessment. In Proceedings of the 2011 IEEE International Conference on Multimedia andExpo. 11–15 July. Barcelona: IEEE, 70 – 76. (IEEEXplore/ISI/SCOPUS Cited Publication).
11. Gonzalez, A. J., **Ghafoor, K. Z.,** Abu Bakar, K. and Rios, A. (2011). Fuzzy Redundancy Adaptation and Joint Source - Network Coding for VANET Video Streaming. In Proceedings of the 2011 Conference on Wired and Wireless Internet Communications. 15–17 June. Barcelona: LNCS, 79 – 89. (ISI/SCOPUS Cited Publication).
 |
| **(c) Book Chapters** |
| 1. AS Sadiq, H Faris, AZ Ala'M, S Mirjalili, **Ghafoor, K. Z.** (2019). Fraud Detection Model Based on Multi-Verse Features Extraction Approach for Smart City Applications. Smart Cities Cybersecurity and Privacy, 241-251.
2. Rios, A., Gonzalez, A. J., Alcober, J., Ozon, J. and **Ghafoor, K. Z.** (2011).Conferencing Services in P2P Networks: Trends and Challenges. 1st. ed., River Publisher. 2011. (ISI/SCOPUS Cited Publication).
3. **Ghafoor, K. Z.,** Marwan Aziz Mohammed, Kamalrulnizam Abu Bakar, Ali Safa Sadiq, Jaime Lloret. (2013).Vehicular Cloud Computing: Trends and Challenges. Mobile Computing over Cloud: Technologies, Services, and Applications". IGI Publisher. 2013. (ISI/SCOPUS Cited Publication).
4. Ali Safa Sadiq. Kamalrulnizam Abu Bakar . **Ghafoor, K. Z.,** Jaime Lloret. (2014). Cognitive Handover for Vehicular Heterogeneous Networks, Issues and Challenges. Cognitive networks: applications and deploymentsCRC Press - Taylor & Francis Group Publisher, USA. 2014. (ISI/SCOPUS Cited Publication).
5. Danda B. Rawat. Chandra Bajracharya***.*** Jaime Lloret. **Ghafoor, K. Z.** (2014). Cognitive Radio Enabled Vehicular Networking for Transportation Cyber Physical Systems. Cognitive networks: applications and deployments. CRC Press - Taylor & Francis Group Publisher, USA. 2014. (ISI/SCOPUS Cited Publication).
 |
| **(d) Books**  |
| 1. Jaime Lloret Mauri, **Kayhan Zrar Ghafoor**, Danda B. Rawat, Javier Manuel Aguiar Perez, (2015), Cognitive Networks: Applications and Deployments, Taylor & Francis Publisher, CRC Press.
2. Danda B. Rawat, **Kayhan Zrar Ghafoor**, (2018), Privacy and Cybersecurity for Smartcities, Elsevier Publisher, Elsevier Press.
 |
| **(iv) Major Projects** |
| * **Project 1**

**Project title:** Design of Relay Protection Systems for Dokan Hydro-Power Plant in Kurdistan, (1 October 2002 to 1June 2003)**Tools & Technologies:** Matlab, Real Data Collection in Dokan Hydro-Power Plant, Ms Office, Microsoft window XP.**Summary:** In this project, we have developed a relay protection system using various types of electrical relays to protect the hydro-power plant from electrical faults.**▪ Project 2****Project title:** Design and Implementation of Remote Monitoring Systems, (13January 2005 to 25 April 2006)**Tools & Technologies:** LabVIEW, Packet Capturing Tool, Ms Office, Microsoft window XP.**Summary:** In this project, we have developed a remote monitoring model to read the weather condition in Erbil city in Kurdistan. The developed model, which is based on the LabVIEW, consists of server and client sides. The server-side includes two tasks in order for remotely monitoring temperature and pressure state. The research also designed a scheduling algorithm named Rate-Monotonic with Priority-based Scheduling to switch between the monitored tasks. In this algorithm, Semaphore Synchronization is utilized to synchronize between the scheduled tasks for resource sharing. The simulation results show that the proposed model efficiently monitors the weather condition from remote sites.**▪ Project 3****Project title:** Design of Virtual Local Area Networks (VLAN) for College of Engineering/Koya University**Tools & Technologies:** Packet Tracer, Ms Office.**Summary:** In this project, The design of a complete network is presented for college of engineering at Koya University. |
| **(v) Professional Certification** |
| Cisco Certified Network Administrator (CCNA) on June 31 June 2008, earned in South Korea.  |
| **(vi) English Proficiency** |
| **TOEFL** |
| **Date** | **Listening** | **Reading** | **Writing** | **Overall Band Score** |
| 14 Dec 2010 | 5.5 | 6.0 | 7.0 | 540 |
| **(vii) Honors and Awards** |
| **Name** | **Period/ Date** | **Title** | **Awarding Body** |
| UTM Academic Award in 48th Convocation  | May, 2012 | Academic Award | UTM Chancellor Best Student Award(<http://comp.utm.my/knizam/phd-students/>) |
| International Doctoral Fellowship (IDF) | 2 years, 2009/2011 | International Doctoral Fellowship | University Technology Malaysia (UTM), Malaysia |
| Scholarship of Ahmad Ismail Foundation | 3 year, 2009/2012 | Ahmad Ismail Scholarship for Knowledge Development | Ministry of Higher Education, Kurdistan-Iraq  |
| Best Paper Award | 21 June 2011 | Reliable Video Geocasting over Vehicular Ad Hoc Networks | Pervasive Computing Research Group-Postgraduate Annual Conference-2011 (PCRG-PARS 2011), Malaysia |
| Network Training Course at South Korea  | 1Month, 1 June 2008-1 July 2008 | Information Communication Technology development in Erbil-Kurdistan | Kurdistan Regional Government (KRG) |
| **(viii) Invited as Keynote Speaker** |
| **Title**  | **Date**  | **Place** |
| Drone-assisted Vehicular Edge Computing | April, 2019 | Salahaddin University-Erbil, Iraq |
| Wireless Ad Hoc Networks: An infrastructure for Smart City | April, 2017 | LFU, Erbil, Iraq |
| Vehicular Ad Hoc Networks: Trends and Challenges | Oct 2009 | UTM, FSKSM, Malaysia |
| How to do Research? | Oct 2010 | UTM, FSKSM, Malaysia |
| Simulation of Wireless Networks | Oct 2011 | UTM, FSKSM, Malaysia |
| **(ix) Academic Activities** |
|  |
| **(a) International Journal Papers Reviewing** |
| 1. International Journal of Wireless Personal Communications, Impact Factor 0.504.
2. IEEE Communication Magazine, Impact Factor 2.837.
3. International Journal of Vehicular Technology, Indexed Journal.
4. International Arab Journal of Information Technology, ISI Indexed Journal.
5. International Journal of Network Protocols and Algorithms, ProQuest Indexed Journal.
6. International Journal Ad Hoc & Sensor Wireless Networks. Impact Factor 0.302.
7. International Journal of Computer Technology & Applications, Indexed Journal.
8. International Journal of Communication Systems, Impact Factor 0.229.
9. Journal of Telecommunication Systems, Impact Factor 0.67.
10. International Journal of Ad Hoc Networks, Impact Factor 1.592.
11. The World Scientific and Engineering Academy and Society (WSEAS) Transactions on Communications, ISI Indexed Journal.
12. International Journal of Wireless and Mobile Computing (IJWMC), ISI Indexed Journal.
13. International Journal of Computer and Information Technology, Non-ISI/Non-Scopus Indexed Journal.
14. Malaysian Journal of Computer Science (MJCS). ISI/Scopus Indexed Journal.
15. International Journal of Network and Computer Applications. Impact Factor 1.065.
16. International Journal of Digital Content Technology and its Applications (JDCTA). ISI/Scopus Indexed Journal.
17. Springer Electronic Commerce Research Journal. Impact Factor 0.971.
18. International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC). Impact Factor 0.844.
19. International Journal of Wireless Networks. Impact Factor 0.54.
20. Journal of Communications and Networks. Impact Factor 0.291.
21. Maejo International Journal of Science and Technology. Impact Factor 0.456.
22. Journal of Zankoy Sulaimani – Part A for Pure and Applied Sciences.
23. Transactions on Emerging Telecommunications Technologies. Impact Factor 1.049.
24. International Journal of Information and Communication Technology. ISI Indexed Journal.
25. International Journal of Peer-to-Peer Networking and Applications.
26. International Journal of Smart Grid and Green Communications (IJSGGC).
27. Journal Annals of Telecommunications. Impact Factor 0.699.
28. Theoretical Computer Science. Impact Factor 0.77.
 |
| **(b) International Conference Papers Reviewing** |
| 1. International Workshop on Cognitive-inspired Networks, Systems and Applications (China).
2. 2011 IEEE Symposium of Computers and Informatics (Malaysia).
 |
| **(c) Conference Organizing Committee** |
| 1. 6thInternationalConference on New Trends in Information Science, Service Science and Data Mining (Taiwan)./ section Advances in Vehicular Networks and Applications.
2. Organizing Committee Member in the 7th Postgraduate Annual Conference 2011 (PCRG-PARS 2011) 21 - 23 June, 2011, University Technology Malaysia, Malaysia.
3. Organizing Committee Member in the 2nd National Conference on Computer Graphics Multimedia, CoGRAMM'04, 8-10 December 2004 Selangor, Malaysia.
4. Program committee chair: 2nd Smart Sensor Protocols and Algorithms, SSPA 2014 under ADHOC-NOW 2014 - Thirteenth International Conference on Ad-Hoc Networks and Wireless
5. Publicity and Social Media Chair: The 3rd EAI International Conference on Green Communications and Networking. June 27-29, 2016 | Valencia, Spain.

 **(d) Editorial Board Membership**  |
| 1. International Journal of Advanced Information Technology.
2. International Journal of Research and Reviews in Ad Hoc Networks.
3. International Journal of Computer Science and Information Security.
4. International Journal of Advanced Computer Science and Applications (IJACSA).
5. Journal of Convergence Information Technology (JCIT).
6. [International Journal of New Computer Architectures and their Applications ([(IJNCAA)](http://www.sdiwc.net/ijncaa).](http://www.sdiwc.net/ijncaa)
 |
| **(e) Technical Program Committee**  |
| 1. Program Committee: The Second IEEE International Workshop on Smart Communication Protocols and Algorithms
2. Posters Chair: GreeNets 2012, the 2nd ICST International Conference on Green Communications and Networking.
3. Program Committee: International Conference on Networks and Cyber Security, ICNCS 2012.
4. Program Committee: International Conference on Smart Grids and Green IT Systems (SMARTGREENS).
5. Program Committee: International Workshop on Technologies and Applications for Cyber Physical System (TACPS 2012).
6. Third IEEE International Workshop on Smart Communication Protocols and Algorithms (SCPA 2012 - Winter).
7. Program Committee: Second International Conference on Communications and Electronic Systems (MIC-CES2012).
8. Program Committee: IEEE Vehicular Technology Society, an international Conference (VTS,2013).
9. Program Committee: IEEE International Conference on Communications (IEEE ICC,2013).
10. Program Committee: 2012 12th International Conference on Intelligent Transportation System Telecommunications (ITST 2012).
11. Publicity chair: The Third International Conference on Business Intelligence and Technology (BUSTECH 2013).
12. Program Committee: 2012 International Conference on Connected Vehicles & Expo (ICCVE 2012).
13. Program Committee: 2013 Science and Information Conference.
14. Program Committee: 20133rdInternational Workshop on Advanced Communication Technologies and their Applications to Intelligent transportation systems, Cognitive radios and Sensor networks ([ACTICS'2013](http://people.eku.edu/rawatd/cw/ACTICS%202013/index.html)).
15. Program Committee: The fifth International Conference on Wireless & Mobile Networks (WiMo 2013).
16. Editorial Advisory Board of editing the Bookto be published by IGI Global ([www.igi-global.com](http://www.igi-global.com)): Mobile Computing over Cloud: Technologies, Services, and Applications.
17. Program Committee: The 2013 IEEE 78th Vehicular Technology Conference (VTC2013-Fall).
18. Program Committee:13th International Conference Intelligent Transportation Systems Telecommunications (ITST-2013).
19. Program Committee:2013 International Conference on Connected Vehicles & Expo (ICCVE 2013).
20. Program Committee:2013 International Conference on Connected Vehicles & Expo (ICCVE 2014).
21. Program Committee: 2013 International Conference on Connected Vehicles & Expo ( ICCVE 2014).
22. Program Committee: 2014 IEEE International Conference on Communications - Cognitive Radio and Networks Symposium ( ICC'14 CRN ).
23. Program Committee: Fourth International Conference on Communication Systems and Network Technologies 2014 (CSNT 2014).
24. Program Committee: 2014 International Workshop on Multimedia Wireless ad hoc Networks 2014 (MWaoN 2014).
25. Program Committee: 2014 International Conference on Connected Vehicles & Expo, (ICCVE 2014).
26. Program Committee: IEEE ICC 2015 - Cognitive Radio and Networks Symposium, (ICC'15 (12) CRN) .
27. Program Committee: Sixth International Conference on Computational Intelligence and Communication Networks 2014 (CICN2014).
28. Program Committee: IEEE International Workshop on Cloud-integrated Cyber Physical Systems 2014 [(IEEE Cloud-CPS 2014](http://cloudcps.cwins.org/)).
29. Program Committee: The 29th IEEE International Conference on Advanced Information Networking and Applications (AINA-2015) .
30. Program Committee: The 2015 Third International Workshop on Internet of Things (IoT) Communications and Technologies.
31. Program Committee: 2015 IEEE GLOBECOM Workshop on Advances in Software Defined Radio Access Networks and Context-aware Cognitive Networks 2015 (SDRANCAN-2015).
32. Program Committee: 2016 13th Annual IEEE Consumer Communications and Networking Conference (CCNC 2016).
33. Program Committee: 2015 14th International Conference on ITS Telecommunications (ITST 2015).
34. Program Committee: IEEE 2015 International Conference on Connected Vehicles & Expo (ICCVE 2015).
35. Program Committee: 23rd International Conference on Telecommunications (ICT 2016).
36. Program Committee: APCC 2016 (22nd Asia-Pacific Conference on Communications).
37. Program Committee: 11th EAI International Conference on Test beds and Research Infrastructures for the Development of Networks & Communities. JUNE 13–15, 2016 | HANGZHOU, PEOPLE'S REPUBLIC OF CHINA.
38. Program Committee: The 12th International Conference on Broad-Band Wireless Computing, Communication and Applications. BWCCA-2017, November 8-10, Palau Macaya, Barcelona, Spain
39. Program Committee: 2018 2nd International Conference on Recent Advances in Signal Processing, Telecommunications & Computing (SigTelCom), 2018, Ho Chi Minh City, Vietnam
40. Program Committee: IEEE ICC 2018 Signal Processing for Communications Symposium. 20-24 May 2018, Kansas City, MO, USA
41. Program Committee: The 3rd IEEE Workshop on IEEE International Workshop on Advances in Software Defined and Context Aware Cognitive Networks (IEEE SCAN-2017) will be held in conjunction with IEEE INFOCOM 2018 in HI, USA
42. Program Committee: 16th 2017 International Conference on Intelligent Transportation Systems Telecommunications. Lisbon, Portugal.
43. Program Committee: IEEE GLOBAL COMMUNICATIONS CONFERENCE, Green Communications Systems and Networks. Abu Dhabi, UAE.
44. Program Committee: 2019 3rd International Conference on Recent Advances in Signal Processing, Telecommunications & Computing (SigTelCom). Vietnam.
45. Program Committee: 2019 IEEE Global Communications Conference: Green Communication Systems and Networks. Atlanta, USA.
46. Program Committee: 2019 26th International Conference on Telecommunications (ICT) (ICT 2019). Hanoi, Vietnam.
47. Program Committee: The Smart Cities Symposium 2019 (SCS'19), Bahrain.
48. Program Committee: 2019 IEEE 89th Vehicular Technology Conference: VTC2019-Spring, Kuala Lumpur, Malaysia.
49. Program Committee: 6th International Conference on Internet of Vehicles, Kaohsiung, Taiwan.
50. Program Committee: 2019 International Conference on Telecommunication, Electronic and Computer Engineering (ICTEC 2019). Malaysia
 |
| **(f) Invited External/Internal Examiner** |
| 1. Invited as an External Examiner of a PhD student (Hero Modares (WHA100020)) in University of Malaya, Faculty of Computer Science & Information Technology, with a thesis title: “ENHANCING SECURITY IN MOBILE IPV6 WITH PRIVATE KEY-BASED BINDING UPDATE PROTOCOL”.
2. Invited as examiner of an MSc student (Saja Atta Allah) in Salahaddin University-Hawler, Faculty of Education, with a thesis title: “Improved Email Spam Filtering using Rule-based Classification”.
3. Invited as examiner of an MSc student (Botan Hussain) in Salahaddin University-Hawler, College of Engineering, with a thesis title: “Performance Evaluation of WiMAX Deployment in Erbil City”.
4. Invited as examiner of a MSc student (Fars Elyas Katy) in Duhok University, College of Engineering, with a thesis title: “Software Defined Networking for Critical Real-Time Internet Applications”.
 |
| **(g) Associate Editor** |
| 1. International Journal of Network Protocols and Algorithms (IJNPA).
 |
| **(h) Postgraduate Supervision** |
| 1. Ali Safa Sadiq (PhD in Computer Science). Fuzzy Logic Assisted Advanced Predictive Handover Scheme for Mobile IPv6 Based Wireless Networks. Universiti Teknologi Malaysia, Malaysia, Finished.
2. Sofian Ali Ben Mussa (PhD in Computer Science). Adaptive Beaconing in Vehicular Ad Hoc Networks. Universiti Teknologi Mara, Malaysia, Status: Ongoing.
3. Peshraw Hama Hama Saleh (MSc in Computer Science). An Efficient Handover Prediction In Wireless Local Area Network. University of Sulaimanya.
4. Linsheng Ye, (Master of Engineering ). Shanghai Jiao Tong University. Finished.
5. Zhe Wang, ( Master of Engineering). Shanghai Jiao Tong University. Finished.
6. Haider Abbas (MSc in Computer Science). Dual Connectivity in 5G Communications. University of Sulaimanya.
7. Rozhgar. (MSc in Software Engineering). An Efficient Routing in IoT Wireless Networks. University of Sulaimanya.
8. In addition, I was also involved in helping many MSc student in University Technology Malaysia and worldwide.
 |
| **(i) Invited Guest Editor** |
| 1. Special Issue of the International Journal of Mobile Networks & Applications on protocols and algorithms of vehicular ad hoc networks. (Impact Factor 0.838: JCR), 2013.
2. Editor for a book entitled Cognitive Networks: Applications and Deployments, CRC Press - Taylor & Francis Group, 2014.
3. Special Issue of the International Journal of Network and Computer Applications on green network protocols and algorithms. (Impact Factor 1.467: JCR), 2014.
 |
| **(j) Curriculum Development for New Opened Departments**  |
| 1. Wireless Networks
2. Wireless Ad Hoc Networks
3. Computer Networks
4. Advanced Computer Networks
 |
|  |
| **(xi) Short Courses**  |
| **Course Name** | **Category** | **Period/Date** |
| 1. Introduction to Big Data
 | Big Data, a course offered by University California San Diego | 21 days, Sept., 2017 |
| 1. Vehicular networks at Universiti Teknologi Malaysia (UTM)
 | Wireless Networking Technologies | 2 days, Dec 2008 |
| 1. Wireless Communications/Mobile Computing, at UTM
 | Wireless Networking Technologies | 2 days, Dec 2008 |
| 1. Optical Networks, at UTM
 | Fundamentals of Passive and Active Optical Networks | 2 days, Jul 2009 |
| 1. How to do Research to be Published in High Impact Factor Journals, at UTM
 | Research  | 1 day, Oct 2009 |
| 1. Playing the Game of Academic Publication, UTM
 | Research | 1 day, Jun 2011 |
| 1. Wireless Body Area Networks, at UTM
 | Wireless Sensor Networks | 1 day, Jul 2011 |
| 1. Postgraduate Mobility Management, at Kula Lampur
 | Postgraduate Mobility | 1 day, Nov 2010 |
| 1. Academic Time Management
 | Time Management | 1 day, Jun 2011 |
| 1. Ethics of Academic Plagiarism, at UTM
 | Academic Plagiarism | 1 day, Nov 2010 |
| 1. Academic Presentation, at UTM
 | Research Training | 1 day, May 2009 |
| **(xii) Intensive Course** |
| **Course Name** | **Category** | **Period/Date** |
| Intensive English Course (IEC)  | English Language Proficiency Program | 6 Months, 2 Jan 2009- 21 Jun 2009 |
| **(xiii) Professional Skills** |
| * Very good experience with Java and C++
* NS3 packet level simulator, IEEE 802.11ad framework
* Very good experience in Linux OS.
* Expert simulation experience with Contiki, Cooja; an IoT simulator.
* Very good simulation experience with mininet/mininet-WiFi; Software Defined Network simulator.
* Expert in JiST/SWAN wireless ad hoc network simulator
 |