Academic Resume

Bassam Zafar

Professor, Information Systems Department

Contact Information.

Building 31, Room 157, Ext. 75506, bzafar@kau.edu.sa.

Highest Degree.

2009, Ph.D. Computer Science, System Modelling & simulation Practices, IoT Technologies, AI, Network Communications, De Montfort University, Leicester, UK.

Academic and Professional Experiences.

1. **2020 - Present**
   Professor, , .
2. **2016 - 2020**
   Associate Professor, KAU, KAU.
3. **2014 - Present**
   Microsoft IT Academy IT Director: (JCommunity College), King Abdulaziz University, Jeddah, Saudi Arabia., , .
4. **2012 - Present**
   General Suoervisor of Labs & Technical affairs, audi Arabia, King Abdulaziz University.
5. **2012 - 2023**
   Chairman of Computing and Information Technology Department, KAU, Faculty of Applied Studies.
6. **2011 - Present**
   Assisstant Professor, Saudi Arabia, King Abdul Aziz University.
7. **2009 - 2011**
   Cheif Information Officer, Saudi Arabia, Saudi Red Crescent Authority.
8. **2009 - 2009**
   IT Project Consultant, Saudi Arabia, SBEIT.
9. **2009 - 2009**
    IT Marketing/Sales Consultant, Saudi Arbai, Total Technology Solution.

Research Interests.

Artificial Intelligent, Renewable energy, System Modelling & Simulation Practices, IOT Technologies.

Teaching Interests.

Information System Developments, Enterprise Models, IS Analysis and Architectural Design, Logic Design.

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Certifications and Trainings.

1. Basic Website Investigations, Offered By PATC Global Training Academy, USA.
2. IP Tracing, Offered By PATC Global Training Academy, USA.
3. IT Project Management,Global knowledge, Toronto, Canada.
4. Leading the Way to Get World Class Research Agenda, Academic Leadership Centre, Minister of Higher Education, Jeddah.
5. Cloud Computing Essential, Global Knowledge, Washington, USA.
6. The Essential Academic Leader, Academic Leadership Centre, Minister of Education, Jeddah.
7. Annual Report for Beginners, Council on Occupational Education, Reno, USA.
8. Improving Student Achievement, Council on Occupational Education, Reno, USA.
9. Self-Study Workshop, Council on Occupational Education, Reno, USA.
10. Introduction to Cyber Security, Cisco IT Academy, Jeddah.
11. Reporting Completion, Placement and Licensure, Council on Occupational Education, Reno, USA.
12. The Annual Report, Council on Occupational Education, Wichita, USA.
13. The Annual Report: Reporting Student Achievement Data, Council on Occupational Education, Wichita, USA.
14. How to Host a Visiting Team, Council on Occupational Education, Wichita, USA.
15. Self-Study Workshop, Council on Occupational Education, Wichita, USA.
16. How to Be an Effective PHD Supervisor, Centre for teaching & learning, King Abdulaziz University Jeddah, Saudi Arabia.
17. Leading Change, Centre for teaching & learning, King Abdulaziz University Jeddah, Saudi Arabia,.

Social, Scientific and Professional Affiliation.

1. 2011-Present, Member, King Abdul Aziz University.
2. 2011-Present, Member, British Computer Society.
3. 2011-Present, Member, IEEE.

Funded Projects.

1. 2020, A Smart Reserve scheduling Platform dedicated for Home energy management system with Home-to-vehicle and Vehicle-to-Home Technologies: Regulating Charging and Discharging of the Hybrid , No: G:665-611-1439, KAU, ..
2. 2017, Enhanced EDCA with Deterministic Collision Resolution for Real-Time Communication in Vehicular Ad Hoc Network, KAU
3. 2016, A comparative analysis of multiple sequence alignments for biological data, KAU
4. 2019, A Smart Reserve scheduling Platform dedicated for Home energy management system with Home-to vehicle and Vehicle-to-Home Technologies: Regulating Charging and Discharging of the HybriA Smart Reserve scheduling Platform dedicated for Home energy management system with Home-to vehicle and Vehicle-to-Home Technologies: Regulating Charging and Discharging of the Hybri, KAU

Publications.

1. Ohoud Almughram, Sami Ben Slama, Bassam Zafar, "Model For Managing The Integration Of A Vehicle-To-Home Unit Into An Intelligent Home Energy Management System", Sensors, vol: 22, pp. 8142, 2022.
   DOI: 10.3390/s22218142

2. Bassam Zafar, Sami Abdullah Ben Slama, "Pv-Ev Integrated Home Energy Management Using Vehicle-To-Home (V2h) Technology And Household Occupant Behaviors", Energy Strategy Reviews, vol: 44, pp. 101001, 2022.
   DOI: 10.1016/j.esr.2022.101001

3. Bassam Zafar, Sami Ben Slama, "Energy Internet Opportunities In Distributed Peer-To-Peer Energy Trading Reveal By Blockchain For Future Smart Grid 2.0", Sensors, vol: 22, pp. 8397, 2022.
   DOI: 10.3390/s22218397

4. Ahmed Mueen, Mohammad Awedh and Bassam Zafar, "Multi-Obstacle Aware Smart Navigation System For Visually Impaired People In Fog Connected Iot-Cloud Environment", Health Informatics Journal, 2022.

5. Ayesha Abbasi, Kiran Sultan, Muhammad Adnan Aziz, Adnan Umar Khan, Hassan Abdullah Khalid, Josep M. Guerrero, Bassam A. Zafar, "A Novel Dynamic Appliance Clustering Scheme In A Community Home Energy Management System For Improved Stability And Resiliency Of Microgrids", Ieee Access, vol: 9, pp. 142276-142288, 2021.
   DOI: 10.1109/ACCESS.2021.3119538

6. Yasser AL Sultan, Ben Salma, Bassam A., "Smart Home Energy Management System", International Journal Of Advanced Computer Science And Applications, vol: 12, 2021.
   DOI: 10.14569/IJACSA.2021.0120329

7. Sami S Binyamin, Bassam A Zafar, "Proposing A Mobile Apps Acceptance Model For Users In The Health Area: A Systematic Literature Review And Meta-Analysis", Health Informatics Journal, vol: 27, pp. 146045822097673, 2021.
   DOI: 10.1177/1460458220976737

8. Amal Alhassan, Bassam Zafar, Ahmed Mueen, "Predict Students??? Academic Performance Based On Their Assessment Grades And Online Activity Data", International Journal Of Advanced Computer Science And Applications, vol: 11, 2020.
   DOI: 10.14569/IJACSA.2020.0110425

9. Ben Abdel Ouahab Ikram, Boudhir Anouar Abdelhakim, Astito Abdelali, Bassam Zafar, Bouhorma Mohammed, "Deep Learning Architecture For Temperature Forecasting In An Iot Lora Based System", The 2nd International Conference, pp. 1-6, 2019.
   DOI: 10.1145/3320326.3320375

10. Yasser Al, Bassam A., "Improvising Users Transaction Validation Using Multi-Decision Tree Conditional Of Terms In Block-Chain Verification", International Journal Of Computer Applications, vol: 178, pp. 31-34, 2019.
    DOI: 10.5120/ijca2019919365

11. Kiran Sultan, Ijaz Mansoor Qureshi, Muhammad Atta-ur Rahman, Bassam A. Zafar, Muhammad Zaheer, "Csi Based Multiple Relay Selection And Transmit Power Saving Scheme For Underlay Crns Using Frbs And Swarm Intelligence", International Journal Of Applied Metaheuristic Computing, vol: 10, pp. 1-18, 2019.
    DOI: 10.4018/IJAMC.2019070101

12. Afnan Alazbah, Bassam Zafar, "Pilgrimage (Hajj) Crowd Management Using Agent-Based Method", International Journal In Foundations Of Computer Science & Technology, vol: 09, pp. 01-17, 2019.
    DOI: 10.5121/ijfcst.2019.9101

Publications.

13. Nasri Sihem, Ben Slama Sami, Zafar 2 and, Cherif Adnen, "Intelligent Energy Management Dedicated To Vehicle-To-Home Applications: A Realistic Autonomous Hybrid Power System Using A Pemfc", Bioscience Biotechnology Research Communications, vol: 12, pp. 79-88, 2019.

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14. Bassam Zafar, Ben Slama, Sihem Nasri, Marwan Mahmoud, "Smart Home Energy Management System Design: A Realistic Autonomous V2h / H2v Hybrid Energy Storage System", International Journal Of Advanced Computer Science And Applications, vol: 10, 2019.

   DOI: 10.14569/IJACSA.2019.0100630

15. Kiran Sultan, Atta-ur-Rahman, Bassam A. Zafar, Nahier Aldhafferi, Abdullah Alqahtani, "Intelligent Multiple Relay Selection And Transmit Power-Saving With Abc Optimization For Underlay Relay-Assisted Crns", Journal Of Communications, 2018.

16. Ben Slama Sami, Nasri Sihem, Zafar Bassam, "Design And Implementation Of An Intelligent Home Energy Management System: A Realistic Autonomous Hybrid System Using Energy Storage", International Journal Of Hydrogen Energy, vol: 43, pp. 19352-19365, 2018.

   DOI: 10.1016/j.ijhydene.2018.09.001

17. Sabah Saad, Bassam A., Ahmed Mueen, "Developing A Framework For E-Healthcare Applications Using The Semantic Internet Of Things", International Journal Of Computer Applications, vol: 182, pp. 25-33, 2018.

   DOI: 10.5120/ijca2018918279

18. Abdulrahman Jalal , Sofiane Ouni, Karim Kamoun, Bassam Zafar, "On Improving Sparql Information Retrieval System For Semantic Internet Of Things Applications", International Journal Of Computer Applications, 2018.

19. Abdullah H., Bassam A., Sofiane Ouni, "Enhanced Owl-S Semantic Web Services For Traffic Management System Utilizing Internet Of Things", International Journal Of Computer Applications, vol: 180, pp. 8-16, 2018.

   DOI: 10.5120/ijca2018917009

20. Kiran Sultan, Bassam Zafar, "Performance Analysis Of Relay Subset Selection Schemes For Underlay Relay-Assisted Crns", Iet Communications, vol: 12, pp. 2609-2615, 2018.

   DOI: 10.1049/iet-com.2018.5587

21. Ben Slama Sami, Bassam Zafar Imene, Imene Yahyaoui, Sihem Nasri, Cherif Adnane, Mona Fouad Moussa, "Study Of Dynamic Performance Of An Hybrid Electric System Combining Fc/Battery/Sc", 2017 8th International Renewable Energy Congress (Irec), pp. 1-6, 2017.

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22. bassam zafar, Sofiane Oune, "Efficient Beacon Collision Resolution Procedure For Ieee 802.15.4 /Zigbee Wireless Personal Area Networks", The 8th International Multi-Conference On Complexity, Informatics And Cybernetics: Imcic 2017, 2017.

23. Sofiane Ouni, Narjes Boulila, Bassam A. Zafar, "Enhanced Edca With Deterministic Transmission Collision Resolution For Real-Time Communication In Vehicular Ad Hoc Networks", Wireless Personal Communications, vol: 98, pp. 311-335, 2017.

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24. Ben Slama Sami, Nasri Sihem, Bassam Zafar, Cherif Adnane, "Performance Study And Efficiency Improvement Of Hybrid Electric System Dedicated To Transport Application", International Journal Of Hydrogen Energy, vol: 42, pp. 12777-12789, 2017.

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25. Sihem Nasri, Sami Ben Slama, Imene Yahyaoui, Bassam Zafar, Adnane Cherif, "Autonomous Hybrid System And Coordinated Intelligent Management Approach In Power System Operation And Control Using Hydrogen Storage", International Journal Of Hydrogen Energy, vol: 42, pp. 9511-9523, 2017.
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26. Slama Sami, Sihem Nasri, Bassam Zafar, Adnane Cherif, "Multi-Input Single-Output State Space For Hybrid Power System Approach Using Pemfc", International Journal Of Energy Optimization And Engineering, vol: 6, pp. 35-50, 2017.
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27. Osama S Islam, Bassam Zafar, Ahmed Mueen, Mohammed A. Balubaid, Hani S. Brdesee, "System Analysis And Design For A Business Development Management System Based On Saudi Arabia Market", International Journal In Foundations Of Computer Science & Technology, vol: 7, pp. 01-10, 2017.
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28. Kiran Sultan, Bassam A. Zafar, Muhammad Zubair, Zeeshan Shafi Khan, "Performance Enhancement Of Underlay Cognitive Radio Networks By Intelligent Multiple Relay Selection", 2016 Third International Conference On Mathematics And Computers In Sciences And In Industry (Mcsi), pp. 161-167, 2016.
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29. Bassam A. Zafar, Sofiane Ouni, Narjes Boulila, Leila Saidane, "Communication Delay Guarantee For Ieee 802.11p/Wave Vehicle Networks With Rsu Control", 2016 Ieee 13th International Conference On Networking, Sensing And Control (Icnsc), pp. 1-7, 2016.
     DOI: 10.1109/ICNSC.2016.7478974

30. Nasri Sihem, Cherif Adnan, Ben Slama Sami, Bassam Zafar, "Dynamic Response And Efficiency Improvement Of Hybrid Autonomous Power System", 2016 7th International Conference On Sciences Of Electronics, Technologies Of Information And Telecommunications (Setit), pp. 252-257, 2016.
     DOI: 10.1109/SETIT.2016.7939875

31. Ahmed Mueen, Bassam Zafar, Umar Manzoor, "Modeling And Predicting Students??? Academic Performance Using Data Mining Techniques", International Journal Of Modern Education And Computer Science, vol: 8, pp. 36-42, 2016.
     DOI: 10.5815/ijmecs.2016.11.05

32. Kiran Sultan, Bassam A., Waseem Khan, Atta-Ur Rahman, "Snr Maximization Using Fuzzy Rule Based System In Relay Assisted Cognitive Radio Networks", Communications On Applied Electronics, vol: 4, pp. 42-48, 2016.
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33. Ben Slama Sami, Zafar Bassam, "A Mimo State Space Of A Hybrid Electrical System Pemfc /Ultra-Capacitor Bank Based On Energy Management Strategy", Irec2015, 2015.

34. Basit Ali, Umar Manzoor, and Bassam Zafar2, "Ejade-S: Encrypted Jade-S For Securing Multi-Agent Applications", Int''L Conf. Artificial Intelligence, 2015.

35. S. Jawadi, S. B. Slama, B. Zafar, A. Cherif, "An Efficient Control Strategy For Hybrid Pemfc/Supercapacitor Power Source Applied For Automotive Application", 2015 16th International Conference On Sciences And Techniques Of Automatic Control And Computer Engineering (Sta), pp. 432-437, 2015.
     DOI: 10.1109/STA.2015.7505094

36. Sami Ben Slama, Sihem Nasri, Basam Zafar, Adnane Cherif, "A Novel Supervisory Command Integration For Large-Scale Of A Solar Energy/Fuel Cell/Ultra-Capacitor", International Journal On Electrical Engineering And Informatics, vol: 7, pp. 464-474, 2015.
     DOI: 10.15676/ijeei.2015.7.3.9

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37. Kiran Sultan, Bassam A., Babar Sultan, "Transmit Power Minimization Using Fuzzy Rule Based System In Relay Assisted Cognitive Radio Networks", International Journal Of Computer Applications, vol: 130, pp. 29-34, 2015.

   DOI: 10.5120/ijca2015906953

38. Umar Manzoor, Mohammed A., Bassam Zafar, Hafsa Umar, M. Shoaib, "Semantic Image Retrieval: An Ontology Based Approach", International Journal Of Advanced Research In Artificial Intelligence, vol: 4, 2015.

   DOI: 10.14569/IJARAI.2015.040401

39. Sameen Fatima, Umar Manzoor, Bassam Zafar, and Mohammed A. Balubaid, "Analyzing The Impact Of Social Media On Users", Ijcsi International Journal Of Computer Science Issues, 2015.

40. Umar Manzoor, Sarosh Shahid, Bassam Zafar, Feng Liu, Dong-Hoon Lee, Ricardo Lagoa, Sandeep Kumar, "A Comparative Analysis Of Multiple Sequence Alignments For Biological Data", Bio-Medical Materials And Engineering, vol: 26, pp. S1781-S1789, 2015.

   DOI: 10.3233/BME-151479

41. Ahmed Mueen, Abdullah AL-Malaise AL-Ghamdi, Bassam Zafar, Mohammad Awedh, "Medical Image Classification Using Multi-Vocabulary", Asian Journal Of Applied Sciences, vol: 8, pp. 71-78, 2015.

   DOI: 10.3923/ajaps.2015.71.78

42. Mohammed A., Umar Manzoor, Bassam Zafar, Abdullah Qureshi, Numairul Ghani, "Ontology Based Sms Controller For Smart Phones", International Journal Of Advanced Computer Science And Applications, vol: 6, 2015.

   DOI: 10.14569/IJACSA.2015.060119

43. Ben Slama Sami , Bassam Zafar, Nasri Sihem and Chérif Adnane, "A Multi-Agent Approach To Renewable Energy Based On   Broadcast Algorithm", Wulfenia Journal, 2014.

44. Umar Manzoor, Bassam Zafar, "Multi-Agent Modeling Toolkit ??? Mamt", Simulation Modelling Practice And Theory, vol: 49, pp. 215-227, 2014.

   DOI: 10.1016/j.simpat.2014.09.005

45. Habib M. Fardoun, Antonio Paules Cipres, Abdullah AL-Malaise AL-Ghamdi, Bassam Zafar, "Improvement Of Students Access To Work By Means Of Tics", Procedia - Social And Behavioral Sciences, vol: 122, pp. 367-372, 2014.

   DOI: 10.1016/j.sbspro.2014.01.1356

46. Bassam Zafar, Ahmed Mueen, Mohammad Awedh, Mohammed Balubaid, "Game-Based Learning With Native Language Hint And Their Effects On Student Academic Performance In A Saudi Arabia Community College", Journal Of Computers In Education, vol: 1, pp. 371-384, 2014.

   DOI: 10.1007/s40692-014-0017-7

47. Mohammad Awedh, Ahmed Mueen, Bassam Zafar, Umar Manzoor, "Using Socrative And Smartphones For The Support Of Collaborative Learning", International Journal On Integrating Technology In Education, vol: 3, pp. 17-24, 2014.

   DOI: 10.5121/ijite.2014.3402

48. Umar Manzoor, Maria Zubair, Kanwal Batool, Bassam Zafar, "A Multi-Agent Framework For Efficient Food Distribution In Disaster Areas", International Journal Of Internet Technology And Secured Transactions, vol: 5, pp. 327, 2014.

   DOI: 10.1504/IJITST.2014.068711

49. Habib M. Fardoun, Bassam Zafar, Antonio Paules Cipr??s, "Using Facebook For Collaborative Academic Activities In Education", vol: 8029, pp. 137-146, 2013.

   DOI: 10.1007/978-3-642-39371-6_16

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Publications.

50. Habib M. Fardoun, Bassam Zafar, Abdulrahman H. Altalhi, "Interactive Design System For Schools Using Cloud Computing", Journal Of Universal Computer Science, 2013.

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