

Academic Resume



Mohammed Basher

Associate Professor, Information Technology Department

Associate Professor of Information Technology

Contact Information.

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Highest Degree.

2013, Ph.D in Computer Science, E-Learning, Durham University, UK.

Academic and Professional Experiences.

1. **2022 - Present**
Head on the Accreditation Committee, Information Technology Department, King Abdulaziz University..
2. **2022 - 2023**
Academic Consultant for Establishing Faculty of Tourism, King Khalid University, , .
3. **2021 - 2022**
Member of Investment and Allocation Secretariat Committee, King Abdulaziz University, , .
4. **2020 - 2021**
Deputy Director of the Decision Making Center, Jeddah, King Abdulaziz University.
5. **2019 - Present**
Associate Professor, Faculty of Computing and Information Technology, King Abdulaziz University.
6. **2018 - 2022**
Vice Dean of Development, Faculty of Computing and Information Technology, King Abdulaziz University.
7. **2018 - 2018**
Consultant, Saudi Airlines Catering Company, Jeddah, , .
8. **2016 - Present**
Member of the Advisory Board, Faculty of Tourism, King Abdulaziz University.
9. **2016 - 2018**
Chairman of Information Technology Department, Faculty of Computing and Information Technology, King Abdulaziz University.
10. **2014 - 2019**
Assistant Professor, Faculty of Computing and Information Technology, King Abdulaziz University..
11. **2014 - 2016**
Vice-Dean of Development, Faculty of Tourism, King Abdulaziz University.
12. **2002 - 2013**
Teaching Assistant, Jeddah, Saudi Arabia, King Abdulaziz University.

Research Interests.

Educational technology, Human-computer interaction, Smart Cities Technologies.

Teaching Interests.

HCI, IT Project Management, Technology Enhanced Learning.

Certifications and Trainings.

1. Crisis Management.
2. Academic Leadership in Higher Education.
3. Leadership, LMI GCC, Jeddah.
4. Professional Certificate in Quality Assurance of Higher Education, King Abdulaziz University, Jeddah.
5. International Protocol Manager Training, The Protocol School of Washington, Jeddah.
6. Tourism Principles & Practice for SCTA Licensed Operators, The World Tourism Organization (UNWTO), Jeddah.
7. IT Project Management, Global Knowledge, New York.

Social, Scientific and Professional Affiliation.

1. 2009-Present, Member, IEEE.
2. 2022-Present, Smart Cities Community, IEEE.

Excellence Awards and Patents.

1. 2018, Interior, President Award for Best Department in KAU, King Abdulaziz University.

Funded Projects.

1. 2021, Power Allocation in NOMA-CR for 5G Enabled IoT Networks, King Abdulaziz University, G:368-611-1442.
2. 2022, Optimization with Machine Learning Model for Secure Remote Sensing Scene Image Classification, King Abdulaziz University, IFPIP: 239-611-1443.
3. 2022, Quality of Service of Internet of Things Optimization for Smart Environment Applications, King Abdulaziz University, IFPIP: 333-611-1443.

Publications.

1. Bayan Alnasyan, Mohammed Basher, Madini Alassafi, "The Power Of Deep Learning Techniques For Predicting Student Performance In Virtual Learning Environments: A Systematic Literature Review", Computers And Education: Artificial Intelligence, pp. 100231, 2024.
DOI: [10.1016/j.caeai.2024.100231](https://doi.org/10.1016/j.caeai.2024.100231)
2. Mohammed Mohammed, "Automated Gesture Recognition Using Zebra Optimization Algorithm With Deep Learning Model For Visually Challenged People", Fusion: Practice And Applications, vol: 16, pp. 23-36, 2024.
DOI: [10.54216/FPA.160102](https://doi.org/10.54216/FPA.160102)
3. Mohammed Basher, "Intelligent Breast Mass Classification Approach Using Archimedes Optimization Algorithm With Deep Learning On Digital Mammograms", Biomimetics, vol: 8, pp. 463, 2023.
DOI: [10.3390/biomimetics8060463](https://doi.org/10.3390/biomimetics8060463)
4. Mohammed Basher, Mahmoud Ragab, "Quantum Cat Swarm Optimization Based Clustering With Intrusion Detection Technique For Future Internet Of Things Environment", Computer Systems Science And Engineering, vol: 46, pp. 3783-3798, 2023.
DOI: [10.32604/csse.2023.037130](https://doi.org/10.32604/csse.2023.037130)
5. Mohammed Basher, Mohammad Haseeb Zafar, Imran Khan, "Power Allocation In Noma-Cr For 5g Enabled Iot Networks", Computers, Materials & Continua, vol: 72, pp. 5515-5530, 2022.
DOI: [10.32604/cmc.2022.027532](https://doi.org/10.32604/cmc.2022.027532)
6. Ruiqin Su, Mohammed Basher, Mohamad Salama, "The Optimal Model Of Employment And Entrepreneurship Models In Colleges And Universities Based On Probability Theory And Statistics", Applied Mathematics And Nonlinear Sciences, vol: 0, 2021.
DOI: [10.2478/amns.2021.1.00063](https://doi.org/10.2478/amns.2021.1.00063)
7. Zhengqing Li, Jiliang Mu, Mohammed Basher, Hafnida Hasan, "Application Of Mathematical Probabilistic Statistical Model Of Base – Ffca Financial Data Processing", Applied Mathematics And Nonlinear Sciences, vol: 0, 2021.
DOI: [10.2478/amns.2021.1.00053](https://doi.org/10.2478/amns.2021.1.00053)
8. Jie Chu, Mohammed Basher, Jianshe Wei, "Human Modulated Heart Rate Variability Signal In Sports Using Multifractal Analysis", Fractals, 2021.
DOI: [10.1142/S0218348X22400874](https://doi.org/10.1142/S0218348X22400874)
9. Durr-e-Nayab, Mohammad Haseeb Zafar, Mohammed Basher, "Adaptive Expanding Ring Search Based Per Hop Behavior Rendition Of Routing In Manets", Computers, Materials & Continua, vol: 67, pp. 1137-1152, 2021.
DOI: [10.32604/cmc.2021.014687](https://doi.org/10.32604/cmc.2021.014687)
10. Sabeen Tahir, Basit Shahzad, Sheikh Tahir Bakhsh, Mohammed Basher, "Developing Relationship Among Risk Factors And Project Factors For Large Scale Healthcare Applications", Journal Of Medical Imaging And Health Informatics, vol: 10, pp. 2439-2445, 2020.
DOI: [10.1166/jmihi.2020.3270](https://doi.org/10.1166/jmihi.2020.3270)
11. Abdulrahman Obaid Al-Youbi, Abdulmonem Al-Hayani, Hisham J. Bardesi, Mohammed Basher, Miltiadis D. Lytras, Naif Radi Aljohani, "The King Abdulaziz University (Kau) Pandemic Framework: A Methodological Approach To Leverage Social Media For The Sustainable Management Of Higher Education In Crisis", Sustainability, vol: 12, pp. 4367, 2020.
DOI: [10.3390/su12114367](https://doi.org/10.3390/su12114367)
12. Iftikhar Ahmad, Muhammad Javed Iqbal, Mohammad Basher, "Biological Data Classification And Analysis Using Convolutional Neural Network", Journal Of Medical Imaging And Health Informatics, vol: 10, pp. 2459-2465, 2020.
DOI: [10.1166/jmihi.2020.31792459](https://doi.org/10.1166/jmihi.2020.31792459)

Publications.

13. Sheikh Tahir Bakhsh, Naveed Ahmed, Basit Shahzad, Mohammed Basher, "A Flood Forecasting Model Based On Wireless Sensor And Actor Networks", International Journal Of Advanced Computer Science And Applications, vol: 11, 2020.
DOI: [10.14569/IJACSA.2020.0110856](https://doi.org/10.14569/IJACSA.2020.0110856)
14. Abrar Omar Alkhamisi, Seyed M. Buhari, George Tsamirsis, Mohammed Basher, "An Integrated Incentive And Trust-Based Optimal Path Identification In Ad Hoc On-Demand Multipath Distance Vector Routing For Manet", International Journal Of Grid And Utility Computing, vol: 11, pp. 169, 2020.
DOI: [10.1504/IJGUC.2020.105523](https://doi.org/10.1504/IJGUC.2020.105523)
15. Sabeen Tahir, Basit Shahzad, Sheikh Tahir Bakhsh, Mohammed Basher, "Developing Relationship Among Risk Factors And Project Factors For Large Scale Healthcare Applications", Journal Of Medical Imaging And Health Informatics, vol: 10, pp. 2439-2445, 2020.
DOI: [10.1166/jmhi.2020.32702439](https://doi.org/10.1166/jmhi.2020.32702439)
16. Muhammad Mostafa Monowar, Mohammed Basher, "On Providing Differentiated Service Exploiting Multi-Instance Rpl For Industrial Low-Power And Lossy Networks", Wireless Communications And Mobile Computing, vol: 2020, pp. 1-12, 2020.
DOI: [10.1155/2020/1748647](https://doi.org/10.1155/2020/1748647)
17. Mohammad Zafar, Imran Khan, Mohammed Basher, "Matrix Inversion-Less Direct Decoding For Efficient Channel Estimation In 5g Massive Mimo Systems", Iet Communications, 2020.
DOI: [10.1049/iet-com.2019.0782](https://doi.org/10.1049/iet-com.2019.0782)
18. Manal Al-Rajhi, Mohammed Basher, "Investigating Children'S Learning Of Programming Using Multi-Touch Table", 2019 2nd International Conference On Computer Applications & Information Security (Iccais), pp. 1-6, 2019.
DOI: [10.1109/CAIS.2019.8769493](https://doi.org/10.1109/CAIS.2019.8769493)
19. Amal Alshahrani, Mohammed Basher, Abdulaziz Aljohani, "Personalized Virtual Keyboard For Multi-Touch Tables", 2019 2nd International Conference On Computer Applications & Information Security (Iccais), pp. 1-5, 2019.
DOI: [10.1109/CAIS.2019.8769528](https://doi.org/10.1109/CAIS.2019.8769528)
20. Mohammad Aljohani, Iftikhar Ahmad, Mohammad Basher, Madini O. Alassafi, "Performance Analysis Of Cryptographic Pseudorandom Number Generators", Ieee Access, vol: 7, pp. 39794-39805, 2019.
DOI: [10.1109/ACCESS.2019.2907079](https://doi.org/10.1109/ACCESS.2019.2907079)
21. Wahab Khan, Ali Daud, Khairullah Khan, Jamal Abdul Nasir, Mohammed Basher, Naif Aljohani, Fahd Saleh Alotaibi, "Part Of Speech Tagging In Urdu: Comparison Of Machine And Deep Learning Approaches", Ieee Access, vol: 7, pp. 38918-38936, 2019.
DOI: [10.1109/ACCESS.2019.2897327](https://doi.org/10.1109/ACCESS.2019.2897327)
22. M. Awais, M.J. Iqbal, I. Ahmad, M. O. Alassafi, R.A. AlGhamdi, M. Basher, M. Waqas, "Real-Time Surveillance Through Face Recognition Using Hog And Feedforward Neural Networks", Ieee Access, pp. 1-1, 2019.
DOI: [10.1109/ACCESS.2019.2937810](https://doi.org/10.1109/ACCESS.2019.2937810)
23. Georgios Tsamirsis, Seyed Buhari, Mohammed Basher, Milos Stojmenovic, "Navigating Virtual Environments Using Leg Poses And Smartphone Sensors", Sensors, vol: 19, pp. 299, 2019.
DOI: [10.3390/s19020299](https://doi.org/10.3390/s19020299)
24. Zeeshan Shafiq, Rana Abbas, Mohammad Haseeb Zafar, Mohammed Basher, "Analysis And Evaluation Of Random Access Transmission For Uav-Assisted Vehicular-To-Infrastructure Communications", Ieee Access, vol: 7, pp. 12427-12440, 2019.
DOI: [10.1109/ACCESS.2019.2892776](https://doi.org/10.1109/ACCESS.2019.2892776)

Publications.

25. Naif Radi Aljohani, Ali Daud, Rabeeh Ayaz Abbasi, Jalal S. Alowibdi, Mohammad Basher, Muhammad Ahtisham Aslam, "An Integrated Framework For Course Adapted Student Learning Analytics Dashboard", Computers In Human Behavior, 2018.
DOI: [10.1016/j.chb.2018.03.035](https://doi.org/10.1016/j.chb.2018.03.035)
26. Imran Khan, Mohammad Zafar, Mohammad Jan, Jaime Lloret, Mohammed Basher, Dhananjay Singh, "Spectral And Energy Efficient Low-Overhead Uplink And Downlink Channel Estimation For 5g Massive MIMO Systems", Entropy, vol: 20, pp. 92, 2018.
DOI: [10.3390/e20020092](https://doi.org/10.3390/e20020092)
27. Kamal Hussein, Seyed M. Buhari, Georgios Tsaramirsis, Mohammed Basher, "A New Methodology For Ranking International Universities", Indian Journal Of Science And Technology, vol: 10, pp. 1-21, 2017.
DOI: [10.17485/ijst/2017/v10i36/104094](https://doi.org/10.17485/ijst/2017/v10i36/104094)
28. Muhammad Ashad Kabir, Jun Han, Alan Colman, Naif R. Aljohani, Mohammed Basher, Zhenchang Xing, Shang-Wei Lin, "Engineering Socially-Aware Systems And Applications", 2016 21st International Conference On Engineering Of Complex Computer Systems (Iceccs), pp. 81-90, 2016.
DOI: [10.1109/ICECCS.2016.019](https://doi.org/10.1109/ICECCS.2016.019)
29. Emad A. Alghamdi, Naif R. Aljohani, Abdullah N. Alsaleh, Wafi Bedewi, Mohammed Basher, "Crowdyq", The 17th International Conference, pp. 1-4, 2015.
DOI: [10.1145/2837185.2843852](https://doi.org/10.1145/2837185.2843852)
30. Mohammed Basher, Malcolm Munro, "Enhancing The Quality Of Software Design Through Multi-Touch Interfaces", 2014 Ieee Frontiers In Education Conference (Fie), pp. 1-7, 2014.
DOI: [10.1109/FIE.2014.7044466](https://doi.org/10.1109/FIE.2014.7044466)
31. Mohammed Basher, Liz Burd, Nilufar Baghaei, "Collaborative Software Design Using Multi-Touch Tables", 2012 4th International Congress On Engineering Education (Iceed 2012), pp. 1-5, 2012.
DOI: [10.1109/ICEED.2012.6779276](https://doi.org/10.1109/ICEED.2012.6779276)
32. Mohammed Basher, Liz Burd, "Exploring The Significance Of Multi-Touch Tables In Enhancing Collaborative Software Design Using Uml", 2012 Ieee Frontiers In Education Conference (Fie), pp. 1-5, 2012.
DOI: [10.1109/FIE.2012.6462217](https://doi.org/10.1109/FIE.2012.6462217)
33. Mohammed Basher, Liz Burd, Nilufar Baghaei, "A Multi-Touch Interface For Enhancing Collaborative Uml Diagramming", The 24th Australian Computer-Human Interaction Conference, pp. 30-33, 2012.
DOI: [10.1145/2414536.2414541](https://doi.org/10.1145/2414536.2414541)