

Academic Resume

Abdalmohsen Almalawi

Associate Professor, Computer Science Department

Contact Information.

Room 146, balmalowy@kau.edu.sa.

Highest Degree.

2014, PhD in Computer Science, Computer Science, RMIT University, Australia.

Academic and Professional Experiences.

1. **2023 - Present**
Associate Professor , FCIT, KAU, Jeddah, KAU.
2. **2015 - 2021**
An author and co-author of two books in the related area., FCIT, KAU.
3. **2015 - 2021**
A first author of some excellent journal papers published in competitive venues such as the IEEE Transactions on Knowledge and Data Engineering, IEEE Transactions on Information Forensics and Security, Computers Security, and so on., FCIT, KAU.
4. **2015 - 2021**
Assistant Professor, FCIT, KAU.
5. **2015 - 2021**
10 years of research, teaching, and technical experience in cyber-security, SCADA security, machine learning and programming., FCIT, KAU.

Research Interests.

Cyber security in smart cities, Intrusion detection and cybersecurity of industrial SCADA systems with emphasis on data mining, machine learning, and fast algorithms., Big Data.

Teaching Interests.

Programming, Machine learning, Cyber-security, Database, SCADA security.

Certifications and Trainings.

Social, Scientific and Professional Affiliation.

Funded Projects.

1. 2020, Distinct Research Study Fast Publish (DF-234-611-1441), KAU
2. 2020, Distinct Research Study Fast Publish (DF-262-611-1441), KAU
3. 2020, Distinct Research Study Fast Publish (DF-274-611-1441), KAU
4. 2020, Distinct Research Study Fast Publish (DF-275-611-1441), KAU
5. 2020, Distinct Research Study Fast Publish (DF-263-611-1441), KAU

Publications.

1. Asif Irshad Khana , Abdullah S.Almalaise Alghamdib, Yoosef B.Abushark, Fawaz Alsolami, Abdulmohsen Almalawi, AbdullahMarish Alili, "Recycling Waste Classification Using Emperor Penguin Optimizer With Deep Learning Model For Bioenergy Production", Chemosphere, 2022.
2. Basmah Alsulami, Abdulmohsen Almalawi, Adil Fahad, "Toward An Efficient Automatic Self-Augmentation Labeling Tool For Intrusion Detection Based On A Semi-Supervised Approach", Applied Sciences, vol: 12, pp. 7189, 2022.
DOI: [10.3390/app12147189](https://doi.org/10.3390/app12147189)
3. Abdulmohsen Almalawi, Asif Irshad Khan, Fawaz Alsolami, Ali Alkhathlan, Adil Fahad, Kashif Irshad, Ahmed S. Alfakeeh, Sana Qaiyum, "Arithmetic Optimization Algorithm With Deep Learning Enabled Airborne Particle-Bound Metals Size Prediction Model", Chemosphere, vol: 303, pp. 134960, 2022.
DOI: [10.1016/j.chemosphere.2022.134960](https://doi.org/10.1016/j.chemosphere.2022.134960)
4. Abdulmohsen Almalawi, Asif Irshad Khan, Fahad Alqurashi, Yoosef B. Abushark, Md Mottahir Alam, Sana Qaiyum, "Modeling Of Remora Optimization With Deep Learning Enabled Heavy Metal Sorption Efficiency Prediction Onto Biochar", Chemosphere, vol: 303, pp. 135065, 2022.
DOI: [10.1016/j.chemosphere.2022.135065](https://doi.org/10.1016/j.chemosphere.2022.135065)
5. Asif Irshad Khan, Pravin R. Kshirsagar, Hariprasath Manoharan, Fawaz Alsolami, Abdulmohsen Almalawi, Yoosef B. Abushark, Mottahir Alam, Fekadu Ashine Chamato, Ziya Uddin, "Computational Approach For Detection Of Diabetes From Ocular Scans", Computational Intelligence And Neuroscience, vol: 2022, pp. 1-8, 2022.
DOI: [10.1155/2022/5066147](https://doi.org/10.1155/2022/5066147)
6. Nabeel Albishry, Rayed AlGhamdi, Abdulmohsen Almalawi, Asif Irshad Khan, Pravin R. Kshirsagar, BaruDebtera, Arpit Bhardwaj, "An Attribute Extraction For Automated Malware Attack Classification And Detection Using Soft Computing Techniques", Computational Intelligence And Neuroscience, vol: 2022, pp. 1-13, 2022.
DOI: [10.1155/2022/5061059](https://doi.org/10.1155/2022/5061059)
7. Yoosef B. Abushark, Asif Irshad Khan, Fawaz Alsolami, Abdulmohsen Almalawi, Md Mottahir Alam, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan, "Cyber Security Analysis And Evaluation For Intrusion Detection Systems", Computers, Materials & Continua, vol: 72, pp. 1765-1783, 2022.
DOI: [10.32604/cmc.2022.025604](https://doi.org/10.32604/cmc.2022.025604)
8. Ahmed Saeed Alfakeeh, Abdulmohsen Almalawi, Fawaz Jaber Alsolami, Yoosef B. Abushark, Asif Irshad Khan, Adel Aboud S. Bahaddad, Md Mottahir Alam, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan, "Sustainable-Security Assessment Through A Multi Perspective Benchmarking Framework", Computers, Materials & Continua, vol: 71, pp. 6011-6037, 2022.
DOI: [10.32604/cmc.2022.024903](https://doi.org/10.32604/cmc.2022.024903)
9. Abdulmohsen Almalawi, Fawaz Alsolami, Asif Irshad Khan, Ali Alkhathlan, Adil Fahad, Kashif Irshad, Sana Qaiyum, Ahmed S. Alfakeeh, "An Iot Based System For Magnify Air Pollution Monitoring And Prognosis Using Hybrid Artificial Intelligence Technique", Environmental Research, vol: 206, pp. 112576, 2022.
DOI: [10.1016/j.envres.2021.112576](https://doi.org/10.1016/j.envres.2021.112576)
10. Asif Irshad Khan, Abdullah Saad Al-Malaise ALGhamdi, Fawaz Jaber Alsolami, Yoosef B. Abushark, Abdulmohsen Almalawi, Abdullah Marish Ali, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan, "Integrating Blockchain Technology Into Healthcare Through An Intelligent Computing Technique", Computers, Materials & Continua, vol: 70, pp. 2835-2860, 2022.
DOI: [10.32604/cmc.2022.020342](https://doi.org/10.32604/cmc.2022.020342)

Publications.

11. Ahmed S. Alfakeeh, Abdulmohsen Almalawi, Fawaz Jaber Alsolami, Yoosef B. Abushark, Asif Irshad Khan, Adel Aboud S. Bahaddad, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan, "Hesitant Fuzzy-Sets Based Decision-Making Model For Security Risk Assessment", Computers, Materials & Continua, vol: 70, pp. 2297-2317, 2022.
DOI: [10.32604/cmc.2022.020146](https://doi.org/10.32604/cmc.2022.020146)
12. Bander Ali Saleh Al-rimy, Mohd Aizaini Maarof, Mamoun Alazab, Syed Zainudeen Mohd Shaid, Fuad A. Ghaleb, Abdulmohsen Almalawi, Abdullah Marish Ali, Tawfik Al-Hadhrani, "Redundancy Coefficient Gradual Up-Weighting-Based Mutual Information Feature Selection Technique For Crypto-Ransomware Early Detection", Future Generation Computer Systems, vol: 115, pp. 641-658, 2021.
DOI: [10.1016/j.future.2020.10.002](https://doi.org/10.1016/j.future.2020.10.002)
13. Abdulmohsen Almalawi, Adil Fahad, "An Efficient Network Classification Based On Various-Widths Clustering And Semi-Supervised Stacking", Ieee Access, pp. 1-1, 2021.
DOI: [10.1109/ACCESS.2021.3123451](https://doi.org/10.1109/ACCESS.2021.3123451)
14. Fawaz Jaber Alsolami, Abdullah Saad Al-Malaise ALGhamdi, Asif Irshad Khan, Yoosef B. Abushark, Abdulmohsen Almalawi, Farrukh Saleem, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan, "Impact Assessment Of Covid-19 Pandemic Through Machine Learning Models", Computers, Materials & Continua, vol: 68, pp. 2895-2912, 2021.
DOI: [10.32604/cmc.2021.017469](https://doi.org/10.32604/cmc.2021.017469)
15. Yoosef B. Abushark, Asif Irshad Khan, Fawaz Jaber Alsolami, Abdulmohsen Almalawi, Md Mottahir Alam, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan, "Usability Evaluation Through Fuzzy Ahp-Topsis Approach: Security Requirement Perspective", Computers, Materials & Continua, vol: 680, pp. 1203-1218, 2021.
DOI: [10.32604/cmc.2021.016610](https://doi.org/10.32604/cmc.2021.016610)
16. Fuad A. Ghaleb, Bander Ali Saleh Al-Rimy, Abdulmohsen Almalawi, Abdullah Marish Ali, Anazida Zainal, Murad A. Rassam, Syed Zainudeen Mohd Shaid, Mohd Aizaini Maarof, "Deep Kalman Neuro Fuzzy-Based Adaptive Broadcasting Scheme For Vehicular Ad Hoc Network: A Context-Aware Approach", Ieee Access, vol: 8, pp. 217744-217761, 2020.
DOI: [10.1109/ACCESS.2020.3040903](https://doi.org/10.1109/ACCESS.2020.3040903)
17. Abdulmohsen Almalawi , Zahir Tari , Adil Fahad, Xun Yi, "Scada Security: Machine Learning Concepts For Intrusion Detection And Prevention", 2020.
18. Zahir Tari, Adil Fahad, Abdulmohsen Almalawi ,Xun Yi, "Network Classification For Traffic Management: Anomaly Detection, Feature Selection, Clustering And Classification, Network Classification For Traffic Management: Anomaly Detection, Feature Selection, Clustering And Classification", 2020.
19. Kashif Irshad, Abdulmohsen Almalawi, Khairul Habib, Md. Hasan Zahir, Amjad Ali, Saiful Islam, Bidyut Baran Saha, "Experimental Study Of A Thermoelectric Air Duct Dehumidification System For Tropical Climate", Heat Transfer Engineering, pp. 1-13, 2020.
DOI: [10.1080/01457632.2020.1777008](https://doi.org/10.1080/01457632.2020.1777008)
20. Jakapan Suaboot, Adil Fahad, Zahir Tari, John Grundy, Abdun Naser Mahmood, Abdulmohsen Almalawi, Albert Y. Zomaya, Khalil Drira, "A Taxonomy Of Supervised Learning For Idss In Scada Environments", Acm Computing Surveys, vol: 53, pp. 1-37, 2020.
DOI: [10.1145/3379499](https://doi.org/10.1145/3379499)
21. Sana Qaiyum, Izzatdin Aziz, Mohd Hilmi Hasan, Asif Irshad Khan, Abdulmohsen Almalawi, "Incremental Interval Type-2 Fuzzy Clustering Of Data Streams Using Single Pass Method", Sensors, vol: 20, pp. 3210, 2020.
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Publications.

22. Abdulmohsen Almalawi, Adil Fahad, Zahir Tari, Asif Irshad Khan, Nouf Alzahrani, Sheikh Tahir Bakhsh, Madini O. Alassafi, Abdulrahman Alshdadi, Sana Qaiyum, "Add-On Anomaly Threshold Technique For Improving Unsupervised Intrusion Detection On Scada Data", *Electronics*, vol: 9, pp. 1017, 2020.
DOI: [10.3390/electronics9061017](https://doi.org/10.3390/electronics9061017)
23. Kashif Irshad, Asif Irshad Khan, Sayed Ameenuddin Irfan, Md Mottahir Alam, Abdulmohsen Almalawi, Md. Hasan Zahir, "Utilizing Artificial Neural Network For Prediction Of Occupants Thermal Comfort: A Case Study Of A Test Room Fitted With A Thermoelectric Air-Conditioning System", *Ieee Access*, pp. 1-1, 2020.
DOI: [10.1109/ACCESS.2020.2985036](https://doi.org/10.1109/ACCESS.2020.2985036)
24. Kashif Irshad, Abdulmohsen Almalawi, Asif Irshad Khan, Md Mottahir Alam, Md. Hasan Zahir, Amjad Ali, "An Iot-Based Thermoelectric Air Management Framework For Smart Building Applications: A Case Study For Tropical Climate", *Sustainability*, vol: 12, pp. 1564, 2020.
DOI: [10.3390/su12041564](https://doi.org/10.3390/su12041564)
25. Adil Fahad, Abdulmohsen Almalawi, Zahir Tari, Kurayman Alharthi, Fawaz S. Al Qahtani, Mohamed Cheriet, "Semtra: A Semi-Supervised Approach To Traffic Flow Labeling With Minimal Human Effort", *Pattern Recognition*, vol: 91, pp. 1-12, 2019.
DOI: [10.1016/j.patcog.2019.02.001](https://doi.org/10.1016/j.patcog.2019.02.001)
26. Abdulmohsen Almalawi, Rayed AlGhamdi, Adel Fahad, "Investigate The Use Of Anchor-Text And Of Query-Document Similarity Scores To Predict The Performance Of Search Engine", *International Journal Of Advanced Computer Science And Applications*, vol: 8, 2017.
DOI: [10.14569/IJACSA.2017.081140](https://doi.org/10.14569/IJACSA.2017.081140)
27. Abdul Mohsen Almalawi, Adil Fahad, Zahir Tari, Muhammad Aamir Cheema, Ibrahim Khalil, "Knnvwc: An Efficient K-Nearest Neighbors Approach Based On Various-Widths Clustering", *Ieee Transactions On Knowledge And Data Engineering*, 2016.
28. Abdulmohsen Almalawi, Adil Fahad, Zahir Tari, Muhammad Aamir Cheema, Ibrahim Khalil, "Knnvwc: An Efficient K-Nearest Neighbours Approach Based On Various-Widths Clustering", 2016 *Ieee 32nd International Conference On Data Engineering (Icde)*, pp. 1572-1573, 2016.
DOI: [10.1109/ICDE.2016.7498431](https://doi.org/10.1109/ICDE.2016.7498431)
29. Zahir Tari, Ibrahim Khalil, Abdulmohsen Almalawi, Adil Fahad, Albert Y. Zomaya, Abdun Mahmood, Carlos Queiroz, "Supervisory Control And Data Acquisition (Scada): An Introduction", pp. 1-12, 2016.
DOI: [10.1002/047134608X.W8319](https://doi.org/10.1002/047134608X.W8319)
30. Abdulmohseen Almalawi, Adil Fahad, Zahir Tari, Abdullah Alamri, Albert Zomaya, Rayed AlGhamdi, "An Efficient Data-Driven Clustering Technique To Detect Attacks In Scada Systems", *Ieee Transactions On Information Forensics And Security*, pp. 1-1, 2016.
DOI: [10.1109/TIFS.2015.2512522](https://doi.org/10.1109/TIFS.2015.2512522)
31. Adil Fahad, Kurayman Alharthi, Zahir Tari, Abdulmohsen Almalawi, Ibrahim Khalil, "Cluclas: Hybrid Clustering-Classification Approach For Accurate And Efficient Network Classification", 2014 *Ieee 39th Conference On Local Computer Networks (Lcn)*, pp. 168-176, 2014.
DOI: [10.1109/LCN.2014.6925769](https://doi.org/10.1109/LCN.2014.6925769)
32. Adil Fahad, Kurayman Alharthi, Zahir Tari, Abdulmohsen Almalawi, Ibrahim Khalil, "Cluclas: Hybrid Clustering-Classification Approach For Accurate And Efficient Network Classification", 2014 *Ieee 39th Conference On Local Computer Networks (Lcn)*, pp. 168-176, 2014.
DOI: [10.1109/LCN.2014.6925769](https://doi.org/10.1109/LCN.2014.6925769)
33. Adil Fahad, Zahir Tari, Abdulmohsen Almalawi, Andrzej Goscinski, Ibrahim Khalil, Abdun Mahmood, "Ppfscada: Privacy Preserving Framework For Scada Data Publishing", *Future Generation Computer Systems*, vol: 37, pp. 496-511, 2014.
DOI: [10.1016/j.future.2014.03.002](https://doi.org/10.1016/j.future.2014.03.002)

Publications.

34. Adil Fahad, Zahir Tari, Ibrahim Khalil, Abdulmohsen Almalawi, Albert Y. Zomaya, "An Optimal And Stable Feature Selection Approach For Traffic Classification Based On Multi-Criterion Fusion", Future Generation Computer Systems, vol: 36, pp. 156-169, 2014.
DOI: [10.1016/j.future.2013.09.015](https://doi.org/10.1016/j.future.2013.09.015)
35. Abdulmohsen Almalawi, Xinghuo Yu, Zahir Tari, Adil Fahad, Ibrahim Khalil, "An Unsupervised Anomaly-Based Detection Approach For Integrity Attacks On Scada Systems", Computers & Security, vol: 46, pp. 94-110, 2014.
DOI: [10.1016/j.cose.2014.07.005](https://doi.org/10.1016/j.cose.2014.07.005)
36. Abdulmohsen Almalawi, Zahir Tari, Adil Fahad, Ibrahim Khalil, "A Framework For Improving The Accuracy Of Unsupervised Intrusion Detection For Scada Systems", 2013 12th Ieee International Conference On Trust, Security And Privacy In Computing And Communications (Trustcom), pp. 292-301, 2013.
DOI: [10.1109/TrustCom.2013.40](https://doi.org/10.1109/TrustCom.2013.40)
37. Abdulmohsen Almalawi, Zahir Tari, Ibrahim Khalil, Adil Fahad, "Scadavt-A Framework For Scada Security Testbed Based On Virtualization Technology", 38th Annual Ieee Conference On Local Computer Networks (Lcn 2013), pp. 639-646, 2013.
DOI: [10.1109/LCN.2013.6761301](https://doi.org/10.1109/LCN.2013.6761301)