



Academic Resume



Rayed Alghamdi

Associate Professor, Information Technology Department

Dr. AlGhamdi holds a bachelor degree in computer education, Master and Ph.D in communication and information technology. He is currently involved in designing a full interactive e-learning project to target enhancing soft skills for computing students. His current research interests involve e-learning applications, computing students' readiness to confidently join industry manpower.

Contact Information.

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Highest Degree.

2014, Ph.D, Information and Communication Technologies, Griffith University, Australia.

Academic and Professional Experiences.

1. 2020 - 2022

Head of the Executive Master in Information Technology, Faculty of Computing and Information Technology, King Abdulaziz University.

2. 2020 - 2022

Executive Programs Committee, IT Department, Faculty of Computing and Information Technology.

3. 2019 - 2021

IT Undergraduate Curriculum Development, Faculty of Computing and Information Technology, King Abdulaziz University.

4. 2018 - Present

E-learning Coordinator, IT Department, Faculty of Computing and IT.

5. 2017 - 2021

Summer Training Coordinator, IT Department, Faculty of Computing and Information Technology.

6. **2017 - 2020**

Academic Accreditation Committee for IT Program, Faculty of Computing and Information Technology, King Abdulaziz University.

7. 2015 - Present

Convenor of Research and Consultancy Unit, Faculty of Computing and Information Technology, King Abdulaziz Unviersity.

8. 2015 - 2017

Consultant, Vice-Deanship of Graduate Studies, Faculty of Computing and Information Technology., , .

9. 2015 - 2016

Consultant, Teaching & Learning Development, King Abdulaziz University, , .





Research Interests.

E-systems, Technology Adoption, Online Teaching and Learning, Diffusion of Innovation.

Teaching Interests.

Technical Communication, Computer Graphics.

Certifications and Trainings.

- 1. Best Practices for E-learning Course Design in Higher Education.
- 2. Interactive E-learning.
- 3. Massive Open Online Course.

Social, Scientific and Professional Affiliation.

Excellence Awards and Patents.

- 1. 2021, Patent, Liveness detection in fingerprint-based biometric systems, US Patent.
- 2. 2017, Interior, KAU President's Award for Excellence and Creativity in E-Learning, King Abdulaziz University.
- 3. 2019, Interior, KAU President's Award for Excellence and Creativity in E-Learning, King Abdulaziz University.
- 4. 2022, Interior, Best Project, Ministry of Hajj, Saudi Arabia.

Funded Projects.

- 1. 2022, Blockchain Based Digital Twin System for Healthcare, King Abdulaziz University, in progress.
- 2. 2022, Virtual Reality Emergency Evacuating Simulator by Using Dijkstra's Algorithm: Hajj Umrah Case Study, King Abdulaziz University, in progress.
- 3. 2022, Activities Tracking by Smartphone and Smartwatches Biometric Sensors using Fuzzy Set Theory, King Abdulaziz University, in progress.
- 4. 2021, Developing Trust in Internet of Things Healthcare Information Based AI and Blockchain, King Abdulaziz University, Institutional Funds Projects in Research and Innovation in progress.
- 2021, Detection of Autonomic Nervous Dysfunction in COVID-19 Patients After Recovery using Interbeat Interval Time Series and Machine Learning Techniques, King Abdulaziz University, Institutional Funds Projects in Research and Innovation - in progress.
- 6. 2021, Liveness detection in fingerprint-based biometric systems, King Abdulaziz University
- 7. 2021, Predicting catastrophic temperature changes based on past events via a CNN-LSTM regression mechanism, King Abdulaziz University
- 8. 2021, Deep learning model with ensemble techniques to compute the secondary structure of proteins, King Abdulaziz University
- 9. 2021, Emergency Prioritized and Congestion Handling Protocol for Medical Internet of Things, King Abdulaziz University
- 10. 2021, Determining Large Scale Healthcare Projects by Resource Attribution, King Abdulaziz University
- 11. 2020, Automatic segmentation using a hybrid dense network integrated with an 3D-atrous spatial pyramid pooling module for computed tomography (CT) imaging, King Abdulaziz University
- 12. 2020, A DE-ANN Inspired Skin Cancer Detection Approach Using Fuzzy C-Means Clustering, King Abdulaziz University
- 13. 2020, Exploiting Level 1 and Level 3 features of fingerprints for liveness detection, King Abdulaziz University
- 14. 2020, An Autoregressive Exogenous Neural Network to Model Fire Behavior via a Naïve Bayes





Filter, King Abdulaziz University

- 15. 2020, Determining factors pertaining to cloud security adoption framework in government organizations: an exploratory study, King Abdulaziz University
- 16. 2020, Real-time surveillance through face recognition using HOG and feedforward neural networks, King Abdulaziz University
- 17. 2017, Adaptive Sleep Efficient Hybrid Medium Access Control algorithm for next-generation wireless sensor networks, King Abdulaziz University
- 18. 2017, Fog-based healthcare architecture for wearable body area network, King Abdulaziz University
- 19. 2015, Self-schedule and self-distributive mac scheduling algorithms for next-generation sensor networks, King Abdulaziz University





Publications.

- Rayed AlGhamdi, "Development Of Soft Skills Among Computing Students In Online Task-Based Learning: Insights From Technical Communication Course", International Journal Of Technology In Education, vol: 6, pp. 260-282, 2023. DOI: 10.46328/ijte.394
- 2. Madini O. Alassafi, Ishtiaq Rasool Khan, Rayed AlGhamdi, Wajid Aziz, Abdulrahman A. Alshdadi, Mohamed M. Dessouky, Adel Bahaddad, Ali Altalbe, Nabeel Albishry, "Studying Dynamical Characteristics Of Oxygen Saturation Variability Signals Using Haar Wavelet", Healthcare, vol: 11, pp. 2280, 2023.

DOI: 10.3390/healthcare11162280

 Madini O. Alassafi, Muhammad Sohail Ibrahim, Imran Naseem, Rayed AlGhamdi, Reem Alotaibi, Faris A. Kateb, Hadi Mohsen Oqaibi, Abdulrahman A. Alshdadi, Syed Adnan Yusuf, "A Novel Deep Learning Architecture With Image Diffusion For Robust Face Presentation Attack Detection", Ieee Access, pp. 1-1, 2023.

DOI: 10.1109/ACCESS.2023.3285826

- Madini O. Alassafi, Muhammad Sohail Ibrahim, Imran Naseem, Rayed AlGhamdi, Reem Alotaibi, Faris A. Kateb, Hadi Mohsen Oqaibi, Abdulrahman A. Alshdadi, Syed Adnan Yusuf, "Fully Supervised Contrastive Learning In Latent Space For Face Presentation Attack Detection", Applied Intelligence, 2023. DOI: 10.1007/s10489-023-04619-z
- 5. Ahmad Alzahrani, Mohammed Alshehri, Rayed AlGhamdi, Sunil Kumar Sharma, "Improved Wireless Medical Cyber-Physical System (Iwmcps) Based On Machine Learning", Healthcare, vol: 11, pp. 384, 2023.

DOI: 10.3390/healthcare11030384

6. Abdulrahman A. Alshdadi, Muhammad Usman, Madini O. Alassafi, Muhammad Tanvir Afzal, Rayed AlGhamdi, "Formulation Of Rules For The Scientific Community Using Deep Learning", Scientometrics, 2023.

DOI: 10.1007/s11192-023-04633-5

- Rayed AlGhamdi, Madini O. Alassafi, Abdulrahman A. Alshdadi, Mohamed M. Dessouky, Rabie A. Ramdan, Bassam W. Aboshosha, "Developing Trusted Iot Healthcare Information-Based Ai And Blockchain", Processes, vol: 11, pp. 34, 2022. DOI: 10.3390/pr11010034
- Rayed AlGhamdi, Sunil Kumar Sharma, "Iot-Based Smart Water Management Systems For Residential Buildings In Saudi Arabia", Processes, vol: 10, pp. 2462, 2022. DOI: 10.3390/pr10112462
- 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

- Iftikhar Ahmad, Qazi Emad Ul Haq, Muhammad Imran, Madini O. Alassafi, Rayed A. AlGhamdi, "An Efficient Network Intrusion Detection And Classification System", Mathematics, vol: 10, pp. 530, 2022. DOI: 10.3390/math10030530
- Rayed A. AlGhamdi, "Virtual Internship During The Covid-19 Pandemic: Exploring It Students Satisfaction", Education + Training, vol: ahead-of-print, 2022. DOI: 10.1108/ET-12-2020-0363





Publications.

- Syed Adnan Yusuf, Abdulrahman A. Alshdadi, Madini O. Alassafi, Rayed AlGhamdi, Abdul Samad, "Predicting Catastrophic Temperature Changes Based On Past Events Via A Cnn-Lstm Regression Mechanism", Neural Computing And Applications, 2021. DOI: 10.1007/s00521-021-06033-3
- Salem Alkhalaf, Thamer Alhussain, Fahad Alturise, Tamim Alkhalifah, Rayed AlGhamdi, Bader Alharbi, "E-Learning Environment'''& Effectiveness And Efficiency For Educational Institutions: The Case Of Kau And Qu", Journal Of Engineering And Applied Sciences, vol: 8, pp. 20, 2021.

DOI: 10.5455/jeas.2021050103

14. Rayed AlGhamdi, Azra Aziz, Mohammed Alshehri, Kamal Raj Pardasani, Tarique Aziz, "Deep Learning Model With Ensemble Techniques To Compute The Secondary Structure Of Proteins", The Journal Of Supercomputing, 2021.

DOI: 10.1007/s11227-020-03467-9

 Sheikh Tahir Bakhsh, Basit Shahzad, Sabeen Tahir, Rayed A. Alghamdi, "Determining Large Scale Healthcare Projects By Resource Attribution", Journal Of Medical Imaging And Health Informatics, vol: 10, pp. 2389-2392, 2020.

DOI: 10.1166/jmihi.2020.3268

- Rayed Alghamdi, Seyed Buhari, Madini Alassafi, "From Teaching To Coaching: A Case Study Of A Technical Communication Course", 13th Annual International Conference Of Education, Research And Innovation, pp. 985-991, 2020.
 DOI: 10.21125/iceri.2020.0285
- 17. Seyed Buhari, Rayed Alghamdi, "Impact Of Rubrics-Based Evaluation On Enhancement Of It Students&Rsquo; Written Communication Skills", 13th Annual International Conference Of Education, Research And Innovation, pp. 976-984, 2020.

DOI: 10.21125/iceri.2020.0284

- Sabeen Tahir, Sheikh Tahir Bakhsh, Rayed AlGhamdi, "Emergency Prioritized And Congestion Handling Protocol For Medical Internet Of Things", Computers, Materials & Continua, vol: 66, pp. 733-749, 2020. DOI: 10.32604/cmc.2020.013261
- Abdulrahman A. Alshdadi, Rubab Mehboob, Hassan Dawood, Madini O. Alassafi, Rayed Alghamdi, Hussain Dawood, "Exploiting Level 1 And Level 3 Features Of Fingerprints For Liveness Detection", Biomedical Signal Processing And Control, vol: 61, pp. 102039, 2020. DOI: 10.1016/j.bspc.2020.102039
- Abdulrahman A. Alshdadi, Rayed AlGhamdi, Madini O. Alassafi, Ahmed S. Alfakeeh, Majid H. Alsulami, "A Validation Of A Cloud Migration Readiness Assessment Instrument: Case Studies", Sn Applied Sciences, vol: 2, 2020.

DOI: 10.1007/s42452-020-3162-9

 Sheikh Tahir Bakhsh, Basit Shahzad, Sabeen Tahir, Rayed A. Alghamdi, "Determining Large Scale Healthcare Projects By Resource Attribution", Journal Of Medical Imaging And Health Informatics, vol: 10, pp. 2389-2392, 2020.

DOI: 10.1166/jmihi.2020.32682389

22. Manoj Kumar, Mohammed Alshehri, Rayed AlGhamdi, Purushottam Sharma, Vikas Deep, "A De-Ann Inspired Skin Cancer Detection Approach Using Fuzzy C-Means Clustering", Mobile Networks And Applications, vol: 25, pp. 1319-1329, 2020. DOI: 10.1007/s11036-020-01550-2





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 Syed Adnan Yusuf, Abdulrahman A. Alshdadi, Rayed Alghamdi, Madini O. Alassafi, David J. Garrity, "An Autoregressive Exogenous Neural Network To Model Fire Behavior Via A Na??Ve Bayes Filter", Ieee Access, vol: 8, pp. 98281-98294, 2020. DOI: 10.1109/ACCESS.2020.2997016

 Madini O. Alassafi, Rayed AlGhamdi, Abdulrahman Alshdadi, Abdulwahid Al Abdulwahid, Sheikh Tahir Bakhsh, "Determining Factors Pertaining To Cloud Security Adoption Framework In Government Organizations: An Exploratory Study", Ieee Access, vol: 7, pp. 136822-136835, 2019.

DOI: 10.1109/ACCESS.2019.2942424

 Rayed AlGhamdi, "Fostering Information Technology Students??? Internship Program", Education And Information Technologies, vol: 24, pp. 2727-2739, 2019. DOI: 10.1007/s10639-019-09891-6

 M. Awais, M.J. Iqbal, I. Ahmad, M. O. Alassafi, R.A. AlGhamdi, M. Basheri, 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

- Madini O. Alassafi, Hany F. Atlam, Abdulrahman A. Alshdadi, Abdullah I. Alzahrani, Rayed A. AlGhamdi, Seyed M. Buhari, "A Validation Of Security Determinants Model For Cloud Adoption In Saudi Organisations Context", International Journal Of Information Technology, 2019. DOI: 10.1007/s41870-019-00360-4
- Rayed AlGhamdi, Adel Bahadad, "Assessing The Usages Of Lms At Kau And Proposing ???Force??? Strategy For The Diffusion", Journal Of King Abdulaziz University-Computing And Information Technology Sciences, vol: 7, 2018. DOI: 10.4197/Comp.7-1.4
- 29. 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
- Sabeen Tahir, Sheikh Tahir Bakhsh, Rayed Alghamdi, Maysoon Abulkhair, "Fog-Based Healthcare Architecture For Wearable Body Area Network", Journal Of Medical Imaging And Health Informatics, vol: 7, pp. 1409-1418, 2017. DOI: 10.1166/jmihi.2017.2152
- 31. Sheikh Tahir Bakhsh, Rayed AlGhamdi, Abdulrahman H. Altalhi, Sabeen Tahir, Muhammad Aman Sheikh, "Adaptive Sleep Efficient Hybrid Medium Access Control Algorithm For Next-Generation Wireless Sensor Networks", Eurasip Journal On Wireless Communications And Networking, vol: 2017, 2017. DOI: 10.1186/s13638-017-0870-y
- 32. 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
- 33. Sheikh Tahir Bakhsh, Muhammad Aman Sheikh, Rayed AlGhamdi, "Self-Schedule And Self-Distributive Mac Scheduling Algorithms For Next-Generation Sensor Networks", International Journal Of Distributed Sensor Networks, vol: 2015, pp. 1-17, 2015. DOI: 10.1155/2015/746216
- 34. Rayed AlGhamdi, Osama Alfarraj & Adel Bahadad, "How Retailers At Different Stages Of E-Commerce Maturity Evaluate Their Entry To E-Commerce Activities?, Journal Of Computer Science And Information Technology, 2: 2, Pp: 37-71. American Research Institute For Policy Development.", Journal Of Computer Science And Information Technology, 2014.





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- 35. Adel Bahadad, Rayed AlGhamdi & Salem Alkhalaf, "Adoption Factors For E-Malls In The Sme Sector In Saudi Arabia, International Journal Of Computer Science And Information Technologies, 5: 4.", International Journal Of Computer Science And Information Technologies, 2014.
- Rayed AlGhamdi, Anne T. A. Nguyen, Vicki Jones, "Wheel Of B2c E-Commerce Development In Saudi Arabia", vol: 208, pp. 1047-1055, 2013. DOI: 10.1007/978-3-642-37374-9_101
- Rayed -, Ann Nguyen, Vicki Jones, "A Study Of Influential Factors In The Adoption And Diffusion Of B2c E-Commerce", International Journal Of Advanced Computer Science And Applications, vol: 4, 2013. DOI: 10.14569/IJACSA.2013.040113
- Thamer Alhussain, Rayed AlGhamdi, Salem Alkhalaf, Osama Alfarraj, "Users??? Perceptions Of Mobile Phone Security: A Survey Study In The Kingdom Of Saudi Arabia", International Journal Of Computer Theory And Engineering, pp. 793-796, 2013. DOI: 10.7763/IJCTE.2013.V5.798
- Muhammed Alshehri, Steve Drew, Thamer Alhussain & Rayed AlGhamdi, "The Effects Of Website Quality On Adoption Of E-Government Service: An Empirical Study Applying Utaut Model Using Sem, In: 23 Rd Australasian Conference On Information Systems, Pp. 1-13, Melbourn, Australia.", Melbourn, 2012.
- 40. Muhammed Alshehri, Steve Drew & Rayed AlGhamdi, "Analysis Of Citizens??? Acceptance For E-Government Services: Applying The Utaut Model In: International Conference Internet Applications And Research 95-105 Lisbon, Portugal: Iadis", International Conference Internet Applications And Research, 2012.
- 41. Salem Alkhalaf, Steve Drew, Rayed AlGhamdi & Osama Alfarraj, "An Evaluation Of E-Learning Systems In Higher-Education Institutions In The Kingdom Of Saudi Arabia: Attitudes And Perceptions Of Faculty Members, In: Cyprus International Conference On Education Research.", Cyprus International Conference On Education Research., 2012.
- 42. Muhammed Alshehri, Steve Drew, Thamer Alhussain & Rayed AlGhamdi, "The Impact Of Trust On E-Government Services Acceptance: A Study Of Users??? Perceptions By Applying Utaut Model, In: International Journal Of Technology Diffusion (Ijtd), 3: 2. Pp: 50-61", Ijtd, 2012.
- 43. Rayed AlGhamdi, Jermey Nguyen, Anne Nguyen & Steve Drew, "Factorsinfluencinge-Commerce Adoption By Retailers In Saudi Arabia: A Quantitative Analysis, In: International Journal Of E-Commerce Studies, 3:1. Pp: 83-100", International Journal Of E-Commerce Studies, 2012.
- 44. Salem Alkhalaf, Steve Drew, Rayed AlGhamdi, Osama Alfarraj, "E-Learning System On Higher Education Institutions In Ksa: Attitudes And Perceptions Of Faculty Members", Procedia - Social And Behavioral Sciences, vol: 47, pp. 1199-1205, 2012.
 DOI: 10.1016/j.sbspro.2012.06.800
- 45. Adel A. Bahaddad, Rayed AlGhamdi, Luke Houghton, "To What Extent Would E-Mall Enable Smes To Adopt E-Commerce?", International Journal Of Business And Management, vol: 7, 2012. DOI: 10.5539/ijbm.v7n22p123
- 46. Mohammed Alshehri, Steve Drew, Thamer Alhussain, Rayed Alghamdi, "The Impact Of Trust On E-Government Services Acceptance", International Journal Of Technology Diffusion, vol: 3, pp. 50-61, 2012. DOI: 10.4018/jtd.2012040105
- 47. Rayed AlGhamdi, Steve Drew, Thamer Alhussain, "A Conceptual Framework For The Promotion Of Trusted Online Retailing Environment In Saudi Arabia", International Journal Of Business And Management, vol: 7, 2012.

DOI: 10.5539/ijbm.v7n5p140

48. Rayed AlGhamdi, Steve Drew & Muhammed Alshehri, "Strategic Government Initiatives To Promote Diffusion Of Online Retailing In Saudi Arabia, In: Sixth International Conference On Digital Information Management, Edited By: Pit Pichappan. Pp. 217-222, Melbourne, Australia: Ieee", Melbourne, 2011.





Publications.

- 49. Rayed AlGhamdi, Anne Nguyen, Jeremy Nguyen & Steve Drew, "Factors Influencing Saudi Customers' Decisions To Purchase From Online Retailers In Saudi Arabia: A Quantitative Analysis, In: International Conference E-Commerce 2011 Edited By:Piet Kommers & Pedro Isa??As. Pp:153-161, Rome, Italy.", Rome, 2011.
- 50. Rayed AlGhamdi, Steve Drew & Salem Alkhalaf, "Government Initiatives: The Missing Key For E-Commerce Growth In Ksa, In: International Conference On E-Commerce, E-Business And E-Service (Iccbs), Pp. 772-775, Paris, France: World Academy Of Science, Engineering And Technology (Waset)", Waset, 2011.
- 51. Rayed AlGhamdi & Steve Drew, "Seven Key Drivers To Online Retailing Growth In Ksa, In: International Conference Of E-Society, Edited By: Piet Kommers And Pedro Isa??As. Pp:237-244 International Association For Development Of The Information Society (Iadis)", Iadis, 2011.
- 52. Rayed AlGhamdi, Steve Drew & Osama Alfarraj, "Issues Influencing Saudi Customers' Decisions To Purchase Form Online Retailers In The Ksa: A Qualitative Analysis, European Journal Of Scientific Research, 55:5. Pp: 580-593", European Journal Of Scientific Research, 2011.
- 53. Rayed AlGhamdi, Steve Drew & Wleed Al-Ghaith, "Factorsinfluencinge-Commerce Adoption By Retailers In Saudi Arabia: A Qualitative Analysis, The Electronic Journal Of Information Systems In Developing Countries, 47: 7, Pp. 1-23", The Electronic Journal Of Information Systems In Developing Countries, 2011.
- 54. Osama Alfarraj, Steve Drew, Rayed Abdullah, "Egovernment Stage Model: Evaluating The Rate Of Web Development Progress Of Government Websites In Saudi Arabia", International Journal Of Advanced Computer Science And Applications, vol: 2, 2011. DOI: 10.14569/IJACSA.2011.020914
- 55. Rayed AlGhamdi, Steve Drew, Mohammed Alshehri, "Strategic Government Initiatives To Promote Diffusion Of Online Retailing In Saudi Arabia", 2011 Sixth International Conference On Digital Information Management (Icdim), pp. 217-222, 2011. DOI: 10.1109/ICDIM.2011.6093333

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