

Prof. Dr. Malek



Contact



malksabah@ahu.edu.jo



(+962) 795355587



Ma'an - Jordan



Research Interests

- ❖ Deep learning
- ❖ Machine Learning
- ❖ Information Retrieval
- ❖ Smart Technologies
- ❖ Technology Acceptance
- ❖ Mobile Learning

Summary

Prof. Dr. Malek Zakarya Alksasbeh is a full professor and currently working as a Senior lecturer in Computer Science at Computer Information Systems Department/Information Technology Faculty - Al-Hussein bin Talal University ([AHU](#)), Ma'an, Jordan. Previously, He was working as assistant professor in Computer Science Department / Al Baha University- Saudi Arabia.

Dr. Alksabeh is an experienced Computer Science (CS) professional. He has previously served as the Head of the Computer Science Department, Head of the Information Systems Department, and Dean of the Faculty of IT. In addition, he has served as a committee member on the Computer Science Department Council, the Computer Information Systems Department Council, the Faculty of IT Council, the AHU Dean's Council, and the AHU University Council.

Dr. Alksasbeh has effectively led teams in delivering high-quality education across seven subjects and conducting high-impact research, which has been published in one book chapter, 30 journal articles, and five conference papers. His research interests include mobile learning, data science, smart technologies, technology acceptance, deep learning, and information retrieval.

Dr. Alksabeh is also a talented leader who has demonstrated strong proficiency in managing various academic responsibilities. With over 13 years of experience in preparing course materials, delivering lectures, supervising capstone projects, and developing academic programs, he has deepened his knowledge and understanding of the requirements set by the Accreditation and Quality Assurance Commission for Higher Education Institutions (AQACHEI) in Jordan. He has also led the design and articulation of complete curriculum plans for both the Computer Science and Computer Information Systems bachelor's degree programs.

In the industry, Dr. Alksasbeh has good experience in Computer Programming, as a Computer Programmer at the Aqaba Special Economic Zone Authority, Aqaba-Jordan.

Malek Zakarya Alksasbeh received his BSc degree in Computer Science from Mu'tah University- Jordan, in 2005, and his master's degree in Information Technology from Universiti Utara Malaysia (UUM) - Malaysia, in 2008. He then obtained his PhD in Computer Science from UUM - Malaysia in 2012.

Education

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| DOCTOR OF PHILOSOPHY IN Computer Science | 2009 – 2012 |
| Universiti Utara Malaysia – Malaysia | |
| MASTER of Science in Information Technology | 2007 – 2008 |
| Universiti Utara Malaysia – Malaysia | |
| Bachelor of Computer Science | 2001 - 2005 |
| Mu'tah University - Jordan | |

Courses Taught (Focused on)

Software Engineering Modules

- ❖ Introduction to Software Engineering
- ❖ Software Design and Implementation
- ❖ Professional and Ethical Practices.
- ❖ Software testing (Validation and Verification).

Information Technology Modules

- ❖ Fundamentals to Information Technology
- ❖ Introduction to Information Systems
- ❖ Fundamentals to Data science (Python)
- ❖ Systems Analysis and Design
- ❖ Database Managment systems
- ❖ Object Oriented Concepts (Java)
- ❖ Information Retrieval
- ❖ Natural Language Processing
- ❖ Internet Programming (HTML,CSS, and Java Script)
- ❖ E-government
- ❖ E-Commerce
- ❖ Business Applications Development (PHP)
- ❖ Graduation Project

Academic and Professional Service Roles

● Moderation

- ✓ Assignment and Final Exam Moderation
- ✓ External Moderation Process
- ✓ Preparing and distributing the Moderation Schedule to unit coordinators
- ✓ Reviewing the moderation reports
- ✓ Ensuring all approved/signed moderation reports is uploaded on Moodle.

● Administration Task

- ✓ Constant communication with unit coordinators and lecturers
- ✓ Ensuring the correct implementation of Moodle unit pages
- ✓ Evaluating Final exam/assessment instruments
- ✓ Conducting and evaluating the assessment moderation process
- ✓ Reviewing and verifying the accuracy of assessment marking
- ✓ Conducting and evaluating the peer review process for lecturers
- ✓ Ensuring smooth and consistent lecture delivery
- ✓ Investigating and evaluating Academic misconduct cases

● Reporting

- ✓ Course Credit Application Process
- ✓ Reporting to the academic Dean
- ✓ Moderation report.

● Subject Expert Matters

Prof. Dr. Malek Alksasbeh is an expert in creating subject materials and has a proven track record of developing high-quality academic programs at Al-Hussien bin Talal University, Jordan. His experience in leading and managing teams has allowed him to create subject materials that is both engaging and relevant to students.

● External Examiner (Postgraduate Research Degrees)

Prof. Dr. Malek Alksasbeh has served as an External Examiner for Postgraduate Research Degrees, contributing his expertise to the evaluation of ten master's theses and four PhD theses in local and international higher education institutions.

● Examiner for Academic Rank Promotions

Prof. Dr. Malek Alksasbeh has served as an examiner for academic rank promotions at various higher education institutions, including 10 local and 4 international cases for associate professorship, as well as 2 international cases for full professorship.

● External Reviewer for Academic Program Licensing

Prof. Dr. Malek Alksasbeh has served as an external reviewer for the Academic Program Licensing in the context of an application for the licensing of a new program in local and international higher education institutions.

Professional Experience

University Academic Experience

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| 10/1/2022 – Now | Full Professor, Department of Computer Information Systems, Faculty of Information Technology, Al-Hussein Bin Talal University – Jordan. |
| 10/1/2018 – 10/1/2022 | Associate Professor, Department of Computer Information Systems, Faculty of Information Technology - Al-Hussein Bin Talal University, Ma'an, Jordan. |
| 15/9/2013 – 10/1/2018 | Assistant Professor – Department of Computer Information Systems, Faculty of Information Technology, Al-Hussein Bin Talal University, Ma'an, Jordan. |
| 1/9/2012 – 1/9/2013 | Assistant Professor – Department of Computer Science, Faculty of Information Technology, Al-Hussein Bin Talal University, Ma'an, Jordan. |
| Sep 2009 – Mar 2010 | Full-time Lecturer – Department of Computer Science, Faculty of Information Technology, Al-Baha University, Al-baha, Saudi Arabia. |
| 2009 - 2012 | Teaching Assistant – Department of Computer Science, Universiti Utara Malaysia – Malaysia |

University Administration Experience

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| 2019 – 2020 | Acting Dean for the Faculty of Information Technology, Al-Hussein Bin Talal University, Ma'an, Jordan. |
| 2015 – 2016 | Head of Computer Information Systems Department, Faculty of Information Technology, Al-Hussein Bin Talal University, Ma'an, Jordan. |
| 2014 – 2015 | Head of Computer Science Department, Faculty of Information Technology, Al-Hussein Bin Talal University, Ma'an, Jordan. |

Other Professional Experience

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| 2005 – 2007 | Programmer/Analyst at the Aqaba Special Economic Zone Authority, Aqaba-Jordan. |
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Membership of University Committees

- Member, University Council, Al-Hussein Bin Talal University (2014/2015)
- Member, Dean's Council, Al-Hussein Bin Talal University (2019 – 2020)
- Head of Information Technology Faculty Council (2019 – 20120)
- Head of Computer Information Systems Department Council (2015/2016)
- Head of Computer Science Department Council (2014/2015)
- Member of Information Technology Faculty Council (2014/2015, 2015/2016, 2016/2017, 2018/2019, 2019/2020, 2022/2023, 2023/2024 and 2024/2025)
- Member of Computer Information Systems Department Council (2013 – Now)
- Member of Faculty Staff Development Center council. (2013 – 2015)

Academic Publications

International Journal Papers

1. Enshirah Altarawneh, Ayyam Alkhawaldeh, Khalid Alemerien, **Malek Alksasbeh**, Tawfiq Alrawashdeh, Mohammad Almseidin: *Performance Evaluation of Convolutional Neural Networks for Architectural Heritage Image Classification*. AI; Submitted 10/2025.
2. Enshirah Altarawneh, Khalid Alemerien, Mohammad Al-Saaydeh, Mohammad Almseidin, Zaid Alhalhouli, **Malek Alksasbeh**, Tawfiq Alrawashdeh: *Intrusion Detection Approach for DDoS Attacks in Internet of Medical Things Based on Optimized Support Vector Machine*. IoT; Submitted 11/2025
3. Tawfiq Alrawashdeh, Sumaya Abusaleh, **Malek Alksasbeh**, Khalid Alemerien: *Life Balloon: A Paradigm Shift in Earthquake Safety - Intelligent IoT Detection and Protection System for Optimal Resilience*. Bulletin of Electrical Engineering and Informatics (BEEI); Accepted 10/2025.
4. Ibrahim Alshalabi, Tawfiq Alrawashdeh, Anas AbuKaraki, **Malek Alksasbeh**: *A Mobile-Enabled Adaptive Gamification Framework for Programming Education*. International Journal of Interactive Mobile Technologies (IJIM) 4/2025; 19(8): 42-69.
5. Ibrahim Alshalabi, Tawfiq Alrawashdeh, Sumaya Abusaleh, **Malek Alksasbeh**, Khalid Alemerien, Shorouq Al-Eidi, Hamzah Alshamaseen: *Detection of COVID-19 using EfficientnetV2-XL and Radam Optimizer from Chest X-ray Images*. Journal of Applied Data Sciences 3/2025; 6(2): 1143-1158.
6. Khaled Alemerien, Aram Al-Ghareeb, **Malek Alksasbeh**: *Sentiment Analysis of Online Reviews: A Machine Learning Based Approach with TF-IDF Vectorization*. Journal of Mobile Multimedia 12/2024; 20(5): 1089-1116.
7. Khalid Alemerien, Sadeq Al-Suhemat, Enshirah Altarawneh, **Malek Alksasbeh**, Tawfiq Alrawashdeh, Fadi Alsuhimat, Zaid Alhalhouli: *A Hybrid CNN-RNN Model Changes the Game for Side-Channel Attack Prediction*. Cluster Computing; Submitted 10/2024.
8. **Malek Alksasbeh**, Anas AbuKaraki, Tawfiq Alrawashdeh, Sumaya Abusaleh, Bilal Alqudah, Khalid Alemerien, Hamzah Al-shamaseen: *Pulmonary Edema and Pleural Effusion Detection Using EfficientNet-V1-B4 Architecture and AdamW Optimizer from Chest X-rays Images*. Computers, Materials and Continua 7/2024; 80(1): 1055-1073.
9. Tawfiq Alrawashdeh, Ibrahim Alkore Alshalabi, Moha'med Al-Jaafreh, **Malek Alksasbeh**: *Smart Indoor Gardening: Elevating Growth, Health, and Automation*. Bulletin of Electrical Engineering and Informatics (BEEI) 4/2024;13(3):1762-1770.

10. **Malek Alksasbeh**, Anas AbuKaraki, Tawfiq Alrawashdeh, Ibrahim Alkore Alshalabi, Moha'med Al-Jaafreh, Abdulhameed Alenezi, Mohammed Al-Kaseasbeh: *New Algorithm for Evaluation of Online Courses Based on Quality Matters Rubric Using Fuzzy Soft Expert Sets*. International Journal of Interactive Mobile Technologies 2/2024;18(4): 32-47.
11. Harbi Al-Mahafzah, Tamer Abu-Khalil, **Malek Alksasbeh**, Bassam Alqaraleh: *Multi-modal palm-print and hand-vein biometric recognition at sensor level fusion*. International Journal of Electrical and Computer Engineering 04/2023; 13(2):1953-1963.
12. Esam Alqaraleh, **Malek Alksasbeh**, Bassam Alqaraleh: *Smart Deep Learning Based Human Behaviour Classification for Video Surveillance*. Computers, Materials and Continua. 4/2022; 72(3):5593-5605.
13. Khaldun Al-Moghrabil, Ali Al-Ghonmein, **Malek Alksasbeh**, Ahmad Al-Dala'ien: *Towards a Cloud Computing Success Model for Hospital Information System in Jordan*. International Journal of Advanced Trends in Computer Science and Engineering. 10/2021; 10(2): 1121-1127.
14. **Malek Alksasbeh**, Tamer Abu-Khalil, Bassam Alqaraleh, Mohammad Al-kaseasbeh: *Smart job searching system based on information retrieval techniques and similarity of fuzzy parameterized sets*. International Journal of Electrical and Computer Engineering 02/2021; 11(1): 635-644.
15. **Malek Alksasbeh**, Ahmad Al-Omari, Bassam Alqaraleh, Tamer Abu-Khalil, Anas Abukarki, Ibrahim Al-kore, Amal Alkaseasbeh: *Smart Hand Gestures Recognition Using K-NN based Algorithm for Video Annotation Purposes*. Indonesian Journal of Electrical Engineering and Computer Science 01/2021; 21(1):242-252.
16. **Malek Alksasbeh**, Tamer Abu-Khalil, Bassam Alqaraleh, Anas Abukarki, Tawfeq Al-Rawashdeh, Mohamed Al-Jaffreh: *Smart Detection of Offensive Words in Social media using Soundex Algorithm and Permuterm Index*. International Journal of Electrical and Computer Engineering 10/2021; 11(5).
17. Bassam Alqaraleh, **Malek Alksasbeh**, Ahmad H. Al-Omari: *A Novel Pending Interest Table Sharing Scheme Using Neuro Fuzzy Logic For Named Data Networking Communication* 1/2021; 99(1): 181-195.
18. **Malek Alksasbeh**, Mohammad Al-kaseasbeh: *Similarity and Agreement Measures and Their Application in Medical Diagnostic Prediction System*. IEEE Access 12/2020;8(99) 228685-228692.
19. Bassam Alqaraleh, **Malek Alksasbeh**, Tamer Abu-Khalil, Harbi Al-Mahafzah, Tawfiq Alrawashdeh: *Recognition Of Handwritten Arabic (Indian) Numerals Using Skeleton Matching*. Indonesian Journal of Electrical Engineering and Computer Science 09/2020; 19(3)1461-1468.
20. Bassam Alqaraleh, Ahmad Al-Omari, **Malek Alksasbeh**: *An Integrated Conceptual Model for m-Government Acceptance in Developing Countries: The Case Study of Jordan*. International Journal of Interactive Mobile Technologies 06/2020; 14(6)115-136.
21. Tamer Abu-Khalil, **Malek Alksasbeh**, Bassam Alqaraleh, Anas Abukarki: *Robot Navigation System Using Laser and a Monocular Camera*. Journal of Theoretical and Applied Information Technology; 04/2020; 98(4) 714-724.
22. Tamer Abu-Khalil, Harbi Al-Mahafzah, **Malek Alksasbeh**, Bassam Alqaraleh: *Fuel Consumption Using DBD-II and Support Vector Machine Model*. Journal of Robotics 01/2020; 2020(ID 9450178).
23. Tamer Abu-Khalil, Harbi Al-Mahafzah, **Malek Alksasbeh**, Bassam Alqaraleh: *Power Optimization in Mobile Robots Using a Real-Time Heuristic*. Journal of Robotics 02/2020; 2020(ID 5972398).
24. Bassam Alqaraleh, **Malek Alksasbeh**, Tamer Abu-Khalil, Harbi Al-Mahafzah: *The impact of information culture on the adoption of mobile cloud learning in higher education environments*. International Journal of Engineering & Technology 04/2019; 8(4) 517-522.
25. **Malek Alksasbeh**, Mohammed Abuhelaleh, Mohammed Amin Almaiah, Mohamed AL-jaafreh , Anas Abu karaki : *Towards a Model of Quality Features for Mobile Social Networks Apps in Learning Environments: An Extended the Information System Success Model*. International Journal of Interactive Mobile Technologies 05/2019;13(5): 75-93.
26. **Malek Alksasbeh**, Mohammad Al-kaseasbeh, Saba Al-kaseasbeh, Khalid Alemerien, Bassam Alqaraleh: *Enhanced Decision Support System Applications Based on Complex Intuitionistic Fuzzy Soft Expert Sets Theory*. Journal of Computer Science 05/2018; 14(5):601-612.
27. **Malek Alksasbeh**, Ahmad Al-dala'ien, Bassam Alqaraleh: *Factors that Influence the Success of Knowledge Management Implementation in Jordanian Higher Education Institutions*. Research Journal of Applied Sciences, Engineering and Technology 7/2018; 15(7):249-260.
28. **Malek Alksasbeh**, Bassam Alqaraleh, Tahseen Alramadin, Khalid Alemerien: *An Automated Use Case Diagrams Generator From Natural Language Requirements*. Journal of Theoretical and Applied Information Technology 03/2017; 95(5):1182-1190.

29. **Malek Alksasbeh**, Bassam Alqaralleh: *Integrating Quality Features into Technology Acceptance Model for Examining the Acceptance of Mobile Banking*. Journal of Theoretical and Applied Information Technology 08/2017; 95(16):3737-3748.
30. Tahseen Al-Ramadin, **Malek Alksasbeh**, Moha'med Al-Jafreeh: *A New Approach for Automated Job Search using Information Retrieval*. Global Journal of Computer Science and Technology 06/2015 ; 15(6):1-7.
31. Mohamed Al-Jaafreh, Tahseen Al-Ramadin, **Malek Alksasbeh**, Ahmed Saidan: *Optical Wireless Home Automation System*. Global Journal of Computer Science and Technology 08/2015 ; 15(8):1-5.
32. **Malek Alksasbeh**: *Integrating mobile technology service quality, trust and cultural factors into technology acceptance of mobile learning*. International Journal of Science, Innovation & New Technology, 2/2013; 1(6):11-18.

International Conference Papers

1. Mohammad Al-kaseasbeh, Saba Al-kaseasbeh, **Malek Alksasbeh**: *Inclusion and Convolution Properties for Certain Class Defined by Convolved Differential Operator*. 3rd International Computer Sciences and Informatics Conference, Balqa, Jordan; 4/2019.
2. **Malek Alksasbeh**, Wan Rozaini Bt Sheik Osman, Huda Bt Hj. Ibrahim: *An Acceptance of Mobile Learning for Higher Education Students in Jordan*. 2nd World Conference on Information Technology (WCIT-2011), Antalya, Turkey; 11/2011.
3. **Malek Alksasbeh**, Huda Bt Hj. Ibrahim, Wan Rozaini Bt Sheik Osman: *Differences in Mobile Learning Acceptance for Higher Education Students in Jordan*. 2nd World Conference on Information Technology (WCIT-2011), Antalya, Turkey; 11/2011.
4. **Malek Alksasbeh**, Wan Rozaini Bt Sheik Osman, Huda Bt Hj. Ibrahim: *Issues and Challenges for Mobile Learning in Jordanian Universities*. Proceedings of the 3rd International Conference on Computing and Informatics, Bandung, Indonesia, Bandung, Indonesia; 06/2011.
5. **Malek Alksasbeh**, Syazwan Abdullah, Wan Rozaini, Sheik Osman, Farihana Elyana: *Using Ontology to Define the Structure of the Holy Quran*. 4th International Conference on Information Technology (ICIT 2009), Amman, Jordan; 01/2009.

Book Chapters

1. Khalid Alemerien, Mohammad Almseidin, Enshirah Altarawneh, **Malek Alksasbeh**: *Autonomous Defending Approaches Based on Machine Learning for Android Malware Detection*, in *AI-Driven Security Systems and Intelligent Threat Response Using Autonomous Cyber Defense*. IGI Global Scientific Publishing. 325-374; 2025.