ASSOCIATE PROFESSOR Dr. Omar AlSheikSalem
CURRICULUM VITAE

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PERSONAL DATA	**Born**: April 28, 1982; **Place**: Amman**,** Jordan **Nationality**: Jordanian	
EDUCATION	**B.Sc.**	Computer Science and Information Systems, Philadelphia University, Amman, Jordan, 2004.
	M. Sc.	Managing Information Technology, University of Salford, Manchester, UK, 2005.
	Ph. D.	Computing, University of Bradford, Bradford, UK, 2011.
TITLES OF THESES	**Ph. D.**	Critical Analysis and Evaluation of Interactive and Customised Applications on Mobile Television
JOB HISTORY	**Feb. 2012-till July 2017**	**Assistant Professor**, Department of Software Engineering, Faculty of Information Technology, Applied Science Private University, Amman-Jordan.
	2014-2016	**Head of the Department of Software Engineering**, Faculty of Information Technology, Applied Science Private University, Amman-Jordan.
	July 2017 till 2019	**Associate Professor**, Department of Software Engineering, Faculty of Information Technology, Applied Science Private University, Amman-Jordan.
	Sep. 2019 till Sep 2020	**Associate Professor**, Department of Computer Sceince, Faculty of Information Technology, Applied Science Private University, Amman-Jordan.
	Sep 2020 till Sep 2021	**Associate Professor**, Department of Software Engineering, Faculty of Information Technology, Applied Science Private University, Amman-Jordan.
	Sep 2021 till now	**Associate Professor**, Department of Software Engineering, Faculty of Information Technology, Philadelphia University, Jerash-Jordan.
TEACHING EXPERIENCE	**Undergraduate Courses**: Electronic Commerce, System Analysis and Design, Project Management, Human-Computer Interaction, Introduction to Software Engineering, Technical Communication Skills, Technical Writing and Communication skills, Digital Socieities, Communication Technology and Social Networks, Communication and Social Media Technology, Computer Skills 1, Computer Skills 2, Multimedia Systems, Discrete Mathematics, User Design Experince.	
RESEARCH INTERESTS	Electronic Marketing, Human Computer Interaction, Design Patterns, Mobile Commerce, E-commerce, Mobile Marketing, Mobile TV, Mobile Computing, Mobile Content, Cloud Computing, Usability and User Experience, Information Security, Mobile Secuity, IOT Security, Network Security.	

- **Scholarships:**

  PhD scholarship 2006-2011 from Applied Science private University, Jordan.

Membership of International Professional Boards

MEMBERSHIP OF UNIVERSITY COMMITTES

(in ascending chronological order)

- Member in Graduation Projects Committee, Faculty of Information Technology, ASU, 2012.
- Head of Graduation Projects Committee, Faculty of Information Technology, ASU, 2013.
- Member in Computer Skills Committee, Faculty of Information Technology, ASU, 2013 and 2016.
- Member in the Faculty Council of Faculty of Information Technology, ASU, 2013-2016.
- Head of Computer Skills Committee, Faculty of Information Technology, ASU, 2014.
- Exhibition Chair of CSIT Conference, Faculty of Information Technology, ASU, 2014.
- Member in Student investigation Committee, Faculty of Information Technology, ASU, 2014.
- Member in Quality Assuarance Committee, Faculty of Information Technology, ASU, 2015.
- Member in Faculty magazine Committee, Faculty of Information Technology, ASU, 2015.
- Member in faculty marketing and public relations Committee, Faculty of Information Technology, ASU, 2015.
- Member in Hiring and Promotion Committee, Faculty of Information Technology, ASU, 2015 – 2016.
- Member in Graduate students Committee, Faculty of Information Technology, ASU, 2015-2016.
- Member of Sceintific contests Committee, Faculty of Information Technology, ASU, 2015-2016.
- Member in Strategic Plan Committee, Faculty of Information Technology, ASU, 2016.
- Member in Qulaity Asuarnce and international accreditation Committee, Faculty of Information Technology, ASU, 2016.
- Member in Qulaity Asuarnce and international accreditation Committee, Faculty of Information Technology, ASU, 2018.
- Member in Faculty Electronic Magazine Committee, Faculty of Information Technology, ASU, 2018.

- Member in Community Service Committee, Faculty of Information Technology, ASU, 2018.
- Member in Qulaity Asuarnce and international accreditation Committee, Faculty of Information Technology, ASU, 2019.
- Member in Community Service Committee, Faculty of Information Technology, ASU, 2019.
- Member in IT Knights Committee, Faculty of Information Technology, ASU, 2019.
- Head of Advising Committee, Faculty of Information Technology, ASU, 2019.
- Head of Advising Committee, Faculty of Information Technology, ASU, 2020.
- Head of Advising Committee, Faculty of Information Technology, ASU, 2021.

SEMINAR PRESENTATIONS

- Paper presentations in CSIT 2013.
- Master of ceremonies for Graduation Projects ceremony, ASU, 2012 and 2013.

PROFESSIONAL AND SCIENTIFIC MEETINGS (CONFERENCES, CONVENTIONS, SYMPOSIA AND TRAINING COURSES) (Last ten years)

- **Meetings**

  Professional meetings with IT based companies and governmental institutions.

  Professional meeting with Erasmus programme representative in Jordan

- **Conferences**

(in descending chronological order)

- Saleh, E., **Al Sheik Salem, O.** (2015). A Model-Driven Engineering Transition-Based GUI Testing Technique. *CSCI '15 Proceedings of the 2015 International Conference on Computational Science and Computational Intelligence (CSCI)* IEEE Computer Society. Las Vegas, NV, USA. Pp.108-113.

- **AlSheikSalem, O.** and Earnshaw, R. (2013). Electronic media and digital convergence. *Proceedings of the 5th International Conference on Computer Science and Information Technology*, pp. 115-120. Amman, Jordan.

- EARNSHAW, R. A., ROBISON, D., **ALSHEIKSALEM, O.** and EXCELL, P. S. (2011). Implementation of Mobile Television Environments with New Forms of Content and Commercial Advertising. *Proceedings of the Fourth International Conference on Internet Technologies and Applications* (ITA11), 6 - 9 September 2011 Glyndwr University, Wrexham, North Wales, UK.

- EARNSHAW, R., **AL SHEIK SALEM, O.**, ROBISON, D. & EXCELL, P. (2009). Interactive Content in Mobile Television Environments. *Proceedings of the Third International Conference on Internet Technologies and Applications* (ITA 09), 8-11 September 2009 Glyndwr University, Wrexham, Wales, UK. pp. 393-399.

- ROBISON, D., PALMER, I. J., EXCELL, P. S., EARNSHAW, R. A. and **AL-SHEIKH SALEM, O.** (2009). Multi-platform Human Computer Interaction in Converged Media Spaces. *Proceedings of the International Conference on CyberWorlds*, Technically co-sponsored by IEEE CS and organised in-cooperation with ACM and Eurographics. University of Bradford, UK. 7-11 September 2009. Published New York, USA. pp.279-286.

PUBLICATIONS

BOOKS OR BOOK CHAPTERS

1. Nael Hirzallah et.al., (2015). Computer Skills Advanced. 2nd edition, International for Consulting and Publishing.
2. Nael Hirzallah et.al., (2015). Computer Skills Basics. 2nd edition, International for Consulting and Publishing.
3. Nael Hirzallah et.al., (2014). Computer Skills Basics & 2. 1st edition, International for Consulting and Publishing.

PAPERS (in descending chronological order)

- **AlSheikSalem, O.**, Qattous, H. (2017). An Expert System For Design Patterns Recognition. *International Journal of Computer Science and Network Security* (IJCSNS), 17(1) :93 -101.

  Several design problems are faced during the designing process of systems. Many of these problems are faced several times throughout the work of designers and programmers during the design and development stage of different systems. Through their work, experts can notice similarities between different design problems contexts and reuse the same previous designed solutions each time. They can notice similarities between different problems contexts because they have the experience to do so. Unfortunately, novices in design cannot recognize these similarities to benefit from using previous solutions to solve their current problem(s). Design patterns are one of the ways to encapsulate the experience of experts as they are considered to be design solutions for recurrent design problems. To use design patterns in solving design problems, a designers should have the experience to discover and recognize the applicability of a specific design pattern that is suitable to solve a specific design problem. This experience is not available to novices in the design and programming fields. Reading documentations of the design patterns from their catalogues is almost the only way that could be followed by novices to take the advantages of applying design patterns solutions to their design problems. This paper investigates the involvement of a rule-based system to assist novices in exploring their design problems. The developed system operates by the dependence on asking the user some questions through which the system can notice the similarities between the current problem and one of the previously solved problems using design patterns. As a result, the developed system, by answering the questions, can recognize a specific suitable design pattern to solve a specific design problem. Throughout the paper, ten design patterns are selected as a representative sample to conduct the investigation.

- Qattous, H., Sowan, B. and **AlSheikSalem, O.** (2016). TeachMe, A Gesture Recognition System With Customization Feature. *International Journal of Advanced Computer Science and Applications* (IJACSA), 7 (11) : 46-50.

  Many presentation these days are done with the help of a presentation tool. Lecturers at Universities and researchers in conferences use such tools to order the flow of the presentation and to help audiences follow the presentation points. Presenters control the presentation tools using mouse and keyboard which keep the presenters always beside the computer machine to be close enough to the keyboard and mouse. This reduces the ability of the lecturer to move close to the audiences and reduces the eye contact with them. Moreover, using such traditional techniques in controlling presentation tools lack the communication naturalness. Several gesture recognition tools are introduced as solutions for these problems. However, these tools require the user to learn specific gestures to control the presentation and/or the mouse. These specific gestures can be considered as a gestures vocabulary for the gesture recognition system. This paper introduces a gesture recognition system, TeachMe, which controls Microsoft PowerPoint presentation tool and the mouse pointer. TeachMe also has a gesture customization feature that allows the user to customize some gestures according to his/her preference. TeachMe uses Kinect device as an interface for capturing gestures. This paper, specifically, discusses in details the techniques and factors taken into consideration for implementing the system and its customization feature.

- **AlSheikSalem, O.**, Al-Ani, M. (2016). Mobile Cloud Computing Applied to Healthcare Approach *International Journal of Information Technology Convergence and Services* (IJITCS), Vol.6, No.5, October 2016: 1-8.

  In the past few years it was clear that mobile cloud computing was established via integrating both mobile computing and cloud computing to be add in both storage space and processing speed. Integrating healthcare applications and services is one of the vast data approaches that can be adapted to mobile cloud computing. This work proposes a framework of a global healthcare computing based combining both mobile computing and cloud computing. This approach leads to integrate all of the required services and overcoming the barriers through facilitating both privacy and security.

  Healthcare and patientcare are very important applications to be adapted via mobile cloud computing approach. The shifting from traditional healthcare model to consumer driven healthcare model is a very important aspect in this approach in which is moving forward to establish a direct private connection to the consumer patient model. This approach achieves a respectable performance of healthcare services anytime anywhere for both privacy and

security of protecting confidential information of the consumer (patient). This issue opens a new future field of computing that lacks resources, including flexible architecture, adapted protocols, real time processing, huge storage, online services, privacy and security.

- **AlSheikSalem, O.**, Qattous, H. and Hijjawi, M. (2015). Mobile Television: Understanding The Technology And Opportunities. *International Journal of Information Technology Convergence and Services* (IJITCS), 5 (5) : 1-9.

  Television have converged the technologies of movies and radio and now being converged with mobile phones. Mobile TV is the result of the convergence between mobile devices and television. Mobile TV is a key device and service that enrich civilization with applications, vast market and great investment. Mobile TV is an important subject that has a potential impact on leading edge technologies for promising future. In the time being Mobile TV is still in its early stages and has many potential; therefore some applications such as mobile advertising and learning are discussed in this paper. When it comes to advertising, Mobile TV presents a new opportunity different from the traditional TV advertisements producing an interactive type of advertisements, enabling user engagement. While in the case of mobile learning, mobile devices open up new chances for absorbing knowledge and most recent information without forgetting the practical experience aspect.

- Hijjawi, M., Qattous, H. and **AlSheikSalem, O.** (2015). Mobile ArabChat: An Arabic Mobile-Based Conversational Agent. *International Journal of Advanced Computer Science and Applications* (IJACSA), 6 (10) : 111-119.

  The conversation automation/simulation between a user and machine evolved during the last years. A number of research-based systems known as conversational agents has been developed to address this challenge. A conversational Agent is a program that attempts to simulate conversations between the human and machine. Few of these programs targeted the mobilebased users to handle the conversations between them and a mobile device through an embodied spoken character. Wireless communication has been rapidly extended with the expansion of mobile services. Therefore, this paper discusses the proposing and developing a framework of a mobile-based conversational agent called Mobile ArabChat to handle the Arabic conversations between the Arab users and mobile device. To best of our knowledge, there are no such applications that address this challenge for Arab mobile-based users. An Android based application was developed in this paper, and it has been tested and evaluated in a large real environment. Evaluation results show that the Mobile ArabChat works properly, and there is a need for such a system for Arab users.

- Saleh, E., **Al Sheik Salem, O.** (2015). A Model-Driven Engineering Transition-Based GUI Testing Technique. *CSCI '15 Proceedings of the 2015 International Conference on Computational Science and Computational Intelligence (CSCI)* IEEE Computer Society. Las Vegas, NV, USA. Pp.108-113.

  Model Driven Engineering (MDE) have arisen as a new software development paradigm which is based on creating a set of models that represent the GUI; afterwards to generate the GUI based on these models using a series of transformations to convert the models between the different levels of abstractions, which enables the automation of the development process. This inspires us to think of a modelbased testing technique that is able to test the GUIs that are designed using Model-Driven engineering by finding the proper model that can serve as a testing model. This paper proposes model-based testing technique that is derived from the design models used to develop the GUI in the Model-Driven Engineering paradigm.

- **AlSheikSalem, O.** and Earnshaw, R. (2013). Electronic media and digital convergence. *Proceedings of the 5th International Conference on Computer Science and Information Technology*, pp. 115-120. Amman, Jordan.

  The shift of media from traditional forms to new digital ones has raised the possibility of new kinds of media services, including mobile television. In today's communications market, mobile phones are of increasing importance to users and, since mobile devices are connected most of the time, they have a high degree of location independence.

- EARNSHAW, R. A., ROBISON, D., **ALSHEIKSALEM, O.** and EXCELL, P. S. (2011). Implementation of Mobile Television Environments with New Forms of Content and Commercial Advertising. *Proceedings of the Fourth International Conference on Internet Technologies and Applications* (ITA11), 6 - 9 September 2011 Glyndwr University, Wrexham, North Wales, UK.

Mobile television environments offer the potential for the repurposing of media content and services, and also the introduction of new forms of commercial advertising which are more accurately targeted towards a user's profile, as per an advertiser's requirements. This modality can include non-commercial information provision. The Google model for linking search terms and keywords to advertisements demonstrates that 'intelligent', context-aware, targeted advertisements are more responsive to user profiles. Advertiser practices such as product placement need re-examination in this context. Prototype mobile TV interfaces, as alternatives to the well-established TV model of viewing content, are presented, in order to evaluate the relationship between television content and mobile devices and to understand the key factors determining possible directions, for the future of mobile television. Changes need to be made to content display, interaction paradigms and device parameters, as social and cultural expectations are re-negotiated.

- EARNSHAW, R., **AL SHEIK SALEM, O.**, ROBISON, D. & EXCELL, P. (2009). Interactive Content in Mobile Television Environments. *Proceedings of the Third International Conference on Internet Technologies and Applications* (ITA 09), 8-11 September 2009 Glyndwr University, Wrexham, Wales, UK. pp. 393-399.

  The use of mobile devices for the broadcasting and caching of interactive television services is an area of increasing interest. This paper reports on research on the content that various kinds of users expect, the opportunities for interactive advertising, both as a revenue stream and as a paradigm for more general forms of interactivity, and the relationship between the content on the device and the real world in which the user is placed. This complex world of information and overlapping realities is analyzed in order to understand the relationship between the real and virtual worlds, and the opportunities for future interactive content as a new form of media.

- ROBISON, D., PALMER, I. J., EXCELL, P. S., EARNSHAW, R. A. and **AL-SHEIKH SALEM, O.** (2009). Multi-platform Human Computer Interaction in Converged Media Spaces. *Proceedings of the International Conference on CyberWorlds*, Technically co-sponsored by IEEE CS and organised in-cooperation with ACM and Eurographics. University of Bradford, UK. 7-11 September 2009. Published New York, USA. pp.279-286.

  The boundaries between different kinds of media spaces are complex and challenging. The convergence of computing, media, and telecommunications produces environments that contain elements of their origins, but also contain new components that allow interaction in new ways by new users with new kinds of information. This poses problems for effective human computer interaction and human media interaction because the paradigms are not well understood. Converged environments are driving these new uses just as the first PCs supported keyboards and then WIMP interfaces. Traditional models of human computer interaction are not adequate to deal with this complexity, and the shifting of the boundaries brought about by convergence.