

Curriculum Vitae

(Last updated 30/11/2012)

Dr. Mousa AL-Akhras, BSc, MSc, PhD, MIEEE

Personal Details:

Name: Mousa T.M. AL-Akhras
Nationality: Jordanian
Telephone Number: + 962 (0) 6 53 55 000 ext. 22602
Mobile Number: + 962 (0) 77 9328463
Fax: + 962 (0) 6 5300 233
Address (work): Department of Computer Information Systems
King Abdullah II School for Information Technology
The University of Jordan
E-mail: Mousa.akhras@ju.edu.jo
Mousa.Akhras@ieee.org
Mousa78@yahoo.com
m.akhras@acmacpc.org



Academic Qualifications:

August 2007 **Ph.D.** in Computer Science
Major: Communications and Neural Networks
De Montfort University, UK, <http://www.dmu.ac.uk>
Thesis Title: Quality of Media Traffic over Lossy Internet Protocol Networks:
Measurement and Improvement
Supervisors: Professor Hussein Zedan and Professor Robert John
June 2003 **M.Sc.** in Computer Science, Average 3.81 / 4.
The University of Jordan, <http://www.ju.edu.jo>
Thesis Title: Instance Reduction Using Techniques For Building Ensembles Of Classifiers
Supervisor: Dr.Khalil El-Hindi
January 2000 **B.Sc.** in Computer Science, Average 3.35 / 4
The University of Jordan, <http://www.ju.edu.jo>
Graduation Project: I worked in a team of 3 members in developing Banking System
Using Developer R2.1 2000 Forms and Reports
1996 General Secondary Education Certificate Exam Scientific Branch, Average 91.2%

Academic Posts

10/2007–Present Assistant Professor
Department of Computer Information Systems
King Abdullah II School for Information Technology
The University of Jordan
Amman, Jordan

12/2009–11/2010 Assistant Dean for Development and Computer Affairs
Faculty of Graduate Studies

10/2004–02/2005 Tutor - De Montfort University, UK

08/2003–01/2004 Teaching Assistant
The University of Jordan

06/2003-08/2003 Part-Time Lecturer
Philadelphia University, Jordan

10/2002–06/2003 Amman Private University – Lecturer
Teaching Introduction to Computer (Skills-1) and Programming Language (1), C++ Course.

Industrial Experience

<p>08/2002 – 09/2002</p>	<p>ESKADENIA SOFTWARE SOLUTIONS , www.eskadenia.com- Consultant agreement for a single project. http://hotels.mota.gov.go Business: This is a website for MOTA (Ministry of Tourism and Antiques). The purpose of this website was to develop an automated web site to collect information about hotels' reservations and fulfilment in hotels across Jordan. This Ministry previously was collecting that information manually. Each hotel has an ID and Password to log on to his profile and enter the hotels information on a monthly basis. The entered information is processed automatically by the new system and set of reports were generated on the web using Crystal report. Implementation: ASP was used for website development and while Crystal Reports used to prepare the summary and analysis reports. MS-SQL 2000 was the backbone database.</p>
<p>05/2001 – 08/2002</p>	<p>3TierFactory Software Solutions, www.3TierFactory.com -System Analyst and Senior VB Developer Projects:</p> <ol style="list-style-type: none"> 1. Accounting System: <ol style="list-style-type: none"> a. Developing a trusted accounting package for the local market for middle to large size companies. b. Careful design for the system for ease of use and good understand of functionality from the end user's perspective. c. This is the core system where other systems can be integrated with. 2. Inventory/Stores System: <ol style="list-style-type: none"> a. This system can be integrated with the accounting system. b. This system used to manage the stock items in the stores, and to produce the stocks sales reports. 3. Car Show System: <ol style="list-style-type: none"> a. The system is used to manage the cars expenses and sales. b. This system can be integrated with the accounting system. 4. Repair Parts and Maintenance System: <ol style="list-style-type: none"> a. This system is used to manage the maintenance process and the parts repair schedule. b. Set of reports is generated to report about the available machines, repair parts, total maintenance's expenses for the machines and other set of reports 5. News Papers' Ads and Invoice System: I worked as a team coordinator in this project and helping in testing some parts of the system <p>Technology:</p> <ol style="list-style-type: none"> 1. VB 6.0 was used as the Programming language. 2. Sql Server 2000 Database. 3. InterBase Open source/ Free of License/ light weighted Database is used as the backend database. 4. Crystal Reports was used as the reporting tool in various systems.
<p>02/2000 – 04/2001</p>	<p>Integrant Inc, www.integrantinc.com - Quality Assurance, team coordinator, analyst and database developer in many projects. Projects:</p> <ol style="list-style-type: none"> 1. http://www.CitizensAdvantage.Com, web application with Oracle Backbone Database Business: The purpose of this project was to provide the facility for online loan submitting with immediate verification and approval or rejection through the connectivity with Zoot Credit Reporting Bureau through XML message exchange. Implementation: The project has two major parts: The first part was implemented using ASP/VB with VB Script and JavaScript with 3 tiers Architecture and this part available for public via the above web site and The Second part implemented using Oracle 8i forms and Reports with remote access using Oracle application server 2. NAGS Systems, National Auto Glass Systems Business: The purpose is to administrate common database accessible from other systems. Implementation: The project implemented using Developer 2000. 3. http://www.HTRN.Org , Web project to announce for meeting schedules and announcements of the HTRN Business group

Professional Membership, Editorial Board, Organizing and Technical Committees

1. Head of Steering Committee of ACM Programming Contest, Jordanian Collegiate Programming Contest (JCPC) <http://www.jcpc-jcpc.org>. Part of International Collegiate Programming Contest <http://icpc.baylor.edu/>.
2. Member of the Editorial Board:
 - IET Teknologia Journal.
 - International Journal of Intelligent Information Processing - ISSN 2093-1964.
3. Guest Editor for International Journal of Information Technology and Web Engineering (IJITWE), Volume 7, Issue 2, 2012.
4. IEEE
 - IEEE Member (01/01/2009-Present).
 - Member of IEEE Computational Intelligence Society (CIS) (01/01/2010–Present).
 - Member of IEEE Robotics and Automation Society (RAS) (01/01/2010–Present).

 - IEEE Jordan Section Executive Committee Member – Secretary General Activities (01/01/2010–Present).
 - Chair IEEE Jordan Joint Computational Intelligence/Computer Chapter (22/2/2012–Present).
 - Vice Chair IEEE Jordan Joint Computational Intelligence/Computer Joint Chapter (02/08/2010–21/02/2012).
 - IEEE Jordan Professional Activities Officer in Jordan (04/09/2011–Present).
5. Technical committee and peer reviewer for the following conferences:
 - The Fifth International Multi-Conference on Systems, Signals, and Devices, IEEE SSD'08, July, 2008, Amman, Jordan.
 - International Arab Conference on e-Technology, October 15-16, 2008, Amman, Jordan.
 - The Seventh International Multi-Conference on Systems, Signals & Devices (SSD'10), 27-30 June, 2010, Amman, Jordan.
 - International Program Committee - The Fourth IEEE International Symposium on Innovation in Information & Communication Technology (ISIICT 2011), 29 November- 1 December, 2011, Amman, Jordan.
 - Control, Robotics and Automation (CRA) track of Mosharaka International Conference on Power Engineering, Control and Mechatronics (MIC-PCM2012), 6-8 April 2012, Barcelona, Spain.
 - Industrial Automation and Embedded Systems track of 8th International Symposium on Mechatronics and its Applications, Sharjah, United Arab Emirates, April 10-12, 2012.
 - International Arab Conference on e-Technology (IACeT'2012), 25-27 April, 2012, Zarqa University, Zarqa, Jordan.
 - Computational Biosciences (CBS) track of Mosharaka International Conference on Biomedical Engineering, Electronics and Nanotechnology (MIC-BEN2012), Palma de Mallorca, Spain, 15-17 June 2012.
 - International Workshop on Advances in Data Management (ADM-2012) - co-located with International Conference on Advances in Computing, Communications and Informatics (ICACCI-2012), 3 - 5 August, 2012, Chennai, India.
 - 2012 International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery (CyberC 2012), 10-12 October, Sanya, China.
 - Intelligent Systems and Knowledge Engineering (ISKE) track of the 5th International Conference on Communications, Computers and Applications (MIC-CCA2012), Istanbul, Turkey, 12-14 October 2012.
 - The First International Conference on Communications, Signal Processing, and their Applications (ICCSA'13), Sharjah, UAE, February 12-14, 2013.
 - The 3rd International Conference on Computing and Artificial Intelligence (MIC-CAI2013), 5-7 April 2013, Belgrade, Serbia.

- The 1st International Conference & Exhibition on the Applications of Information Technology in Developing Renewable Energy Processes and Systems (IT-DREPS 2013), 9-10 April 2013, Amman, Jordan.
 - The first International Conference on Cloud Computing (ICCC'13), 23-25 April 2013, Amman, Jordan.
 - The fourth International Conference on Information and Communication Systems (ICICS'13), 23-25 April 2013, Irbid, Jordan.
6. Technical committee & Reviewer for the following journals:
- Journal of Intelligent & Fuzzy Systems – IOS Press.
 - Computer Methods and Programs in Biomedicine – Elsevier.
 - Computers & Electrical Engineering – Elsevier.
 - IET Wireless Sensor Systems (WSS).
 - The International Arab Journal on e-Technology, ISSN 1997-6364, Arab Open University.
7. Organizing Committee for the following conferences
- Third Mosharaka International Conference on Communications, Networking and Information Technology (MIC-CNIT 2009), December 2009, Amman, Jordan.
 - IEEE Jordan Professional Activities Summit, PA, November 2011.
 - Steering Committee + Publications Chair + Intelligent Systems Track Chair- The IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT 2011), 6 - 8 December, 2011, Amman, Jordan.
 - IEEE Jordan Professional Activities Summit, PA, October 2012.
 - Publication Chair -The 1st International Conference & Exhibition on the Applications of Information Technology in Developing Renewable Energy Processes and Systems (IT-DREPS 2013), 9-10 April 2013, Amman, Jordan.
 - Program Committee - The 1st International Conference on Cloud Computing, 23-25 April, 2013, Princess Sumaya University for Technology, Amman, Jordan.
 - Technical Program Chair - The IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT 2013), 3-5 December, 2013, Amman, Jordan.
8. Microsoft Academic Partner (Formerly known as Dot Net Advisor) – The University of Jordan (1/9/10-Present).
9. Consultant & Judge for the following contests:
- The 4th National Robot Programming Contest, Dead Sea, Jordan 3-4 December 2008.
 - The 1st First Lego League Arabia Championship, Dead Sea, Jordan 27-29 March 2009.
 - The First Lego League Arabia Championship 2010 Dead Sea, Jordan 13-14 March 2010.
 - The First F1 in Schools National Competition 2011 Amman, Jordan 28 May 2011.
 - The 7th National Robot Programming Contest, Amman, Jordan 11-12 February 2012.
 - The Second F1 in Schools National Competition 2012 Amman, Jordan 12 May 2011. **Chief Judge.**
10. Organizing committee for the following contests:
- First Universities Robotics Competition (URC'1), 9-10 May 2011.
 - Head of Steering committee - Second Robotics Championship for Universities (RCU'12), December 2012.
11. Other Committees:
- Higher Education Committee - Services Development Master Plan for the years (2012-2015) in line with the Jordanian National Agenda (2006-2015)- cooperation with Jordan Enterprise Development Corporation (JEDCO).
 - Innovation and Technology Transfer Committee - Services Development Master Plan for the years (2012-2015) in line with the Jordanian National Agenda (2006-2015)- cooperation with Jordan Enterprise Development Corporation (JEDCO).

Funded Projects

1. The University of Jordan - Deanship of Academic Research (DAR). HeliRobot: A prototype was built for flying robot using Lego NXT.
2. The University of Jordan - Deanship of Academic Research (DAR). Robot Library Assistant System: A prototype was built for a library assistant robot using Lego NXT.

Prizes - Awards

1. The University of Jordan Distinguished Researcher Award for the year 2011.
2. ACM Jordanian Collegiate Programming Contest (ICPC-JCPC), Princess Sumaya University for Technology (PSUT)-3rd Place, 16-17/11/2012. Students. Yazan Dabain, Omran AlAmayreh, and Ethar Abu Awwad.
3. Proctor for the team that achieved the 31st ranking in the world out of 1941 teams- IEEEExtreme Programming challenge, 20/10/2012. Students. Mohammad Natsheh, Yazan Dabain, and Omran AlAmayreh.
4. Nominated for Ministry of Higher Education and Scientific Research – Scientific Research Support Fund. Prize for distinguished researcher in IT sector in Jordan over the years 2007-2011.
5. Middle East Technology Show 2011 (METS'11)-University Competition-3rd Place. Delta Robot Project. Tariq Abu Lebdeh+Lina Qasem+Majd Sabbah.
6. First Jordanian Universities Robotics Competition (URC'1), Philadelphia University, 9-10 May 2011 — **Sumo Robot Game Best Design 1st Place**. Abullah Qurashi+Yazan Kobari.
7. First Jordanian Universities Robotics Competition (URC'1), Philadelphia University, 9-10 May 2011 — **Sumo Robot Game Overall 3rd Place**. Osama Abu Qaoud +Ali Hussein+Lina Qasem.
8. First Jordanian Universities Robotics Competition (URC'1), Philadelphia University, 9-10 May 2011 — **Maze Robot Game Best Programming 1st Place**. Tariq Abu Lebdeh.
9. First Jordanian Universities Robotics Competition (URC'1), Philadelphia University, 9-10 May 2011 — **Maze Robot Game Overall 3rd Place**. Tariq Abu Lebdeh.
10. Second Lego League Arabia Championship, Dead Sea, Jordan 13-14 March 2010 — **Scientific Exhibition 1st Place Award**. Bara'a Imran.
11. 1st First Lego League Arabia Championship, Dead Sea, Jordan 27-29 March 2009 – **Audience Voting 1st Place Award**. Noor Jaber-Rawan Abu Zaid-Robot Library Assistant.
12. 1st First Lego League Arabia Championship, Dead Sea, Jordan 27-29 March 2009 – **Proof of Concepts Award**. Noor Jaber-Rawan Abu Zaid-Robot Library Assistant.

Research Interests

Multimedia Networking: Voice over IP & Quality of Speech Aspects, IPTV

Artificial Intelligence:

Robotics, Artificial Neural Networks (ANN), Genetic Algorithms (GA), Fuzzy Logic (FL)

Learning Methodologies

Electronic Learning (E-Learning), Mobile Learning (M-Learning),

Databases

Publications: Scopus Author Identifier: 25653537100

International Journals

1. Iman Almomani, Eman Al-Banna, and **Mousa AL-Akhras**. Logic-based Security Architecture for Systems Providing Multi-Hop Communication. International Journal of Distributed Sensor Networks (ISSN 1210-0552), Vol. 2012, Issue X, pp. XX-XX, 2012. **Accepted**.
2. Khalil El Hindi and **Mousa AL-Akhras**. Smoothing Decision Boundaries to Avoid Overfitting in Neural Network Training. Neural Network World (ISSN 1210-0552), Vol. 21, Issue 4, pp. 311-325, 2011.

3. Iman ALMomani, Mohammed Al-Saruri, and **Mousa AL-Akhras**. Secure Public Key Exchange against Man-In-The-Middle Attacks during Secure Simple Pairing (SSP) in Bluetooth. *World Applied Sciences Journal* (ISSN 1818-4952, EISSN 1991-6426), Vol. 13, Issue 4, pp. 769-780, 2011.
4. **Mousa AL-Akhras**, Mohammad O. Salameh, Maha K. Saadeh, and Mohammed A. ALAwairdhi. An Autonomous Fuzzy-controlled Indoor Mobile Robot for Path Following and Obstacle Avoidance. *International Journal of Computers* (ISSN 1998-4308), Vol. 5, Issue 3, pp. 387-395, 2011.
5. Iman ALMomani, Maha Saadeh, **Mousa AL-Akhras**, and Hamzeh AL Jawawdeh. A Tree-Based Power Saving Routing Protocol for Wireless Sensor Networks. *International Journal of Computers and Communications* (ISSN 2074-1294), Vol. 5, Issue 2, pp. 84-92, 2011.
6. **Mousa AL-Akhras**, Abdullatif Abu-Dalhoun, Heba Saadeh and Heyam Bader. A Genetically-Optimised Artificial Neural Network Approach for Automatic Detection of Blood Vessels Using Gabor Filter. *The Mediterranean Journal of Computers and Networks* (ISSN 1744-2397), Vol. 7, Issue 2, pp. 202-212, April 2011.
7. **Mousa AL-Akhras**, Iman ALMomani and Azzam Sleit. An Improved E-Model Using Artificial Neural Network VoIP Quality Predictor. *Neural Network World* (ISSN 1210-0552), Vol. 21, Issue 1, pp. 3-26, 2011.
8. **Mousa AL-Akhras**, Rizik Al-Sayyed, Marwah Alian and Doaa Qwasmi. *Innovative Secure Mobile Banking Services*. *International Journal of Interactive Mobile Technologies (IJIM)* (ISSN 1865-7923), Vol. 5, Issue 1, pp. 12-21, January, 2011.
9. Moh'd Belal Al-Zoubi, Ali Al-Dahoud and **Mousa AL-Akhras**. *An Efficient Fuzzy K-Medoids Method*. *World Applied Sciences Journal* (ISSN 1818-4952, EISSN 1991-6426), Vol. 10, Issue 5, pp. 574-583, 2010.
10. **Mousa AL-Akhras**, Mohammed Alawairdhi and Dana Beidas. *Search in Multimedia Databases Using Similarity Distance*. *International Journal of Intelligent Information Processing* (ISSN 2093-1964), Vol. 1, Issue 1, pp. 50-60, September, 2010.
11. **Mousa AL-Akhras**, Maha Saadeh. *Automatic Valuation of Jordanian Estates Using A Genetically-Optimised Artificial Neural Network Approach*. *WSEAS TRANSACTIONS on SYSTEMS* (ISSN 1109-2777), Vol. 9, Issue 8, pp. 905-916, August 2010.
12. **Mousa AL-Akhras**, Heyam Bader and Abdullatif Abu-Dalhoun. *Genetic Algorithm Gabor Filter Optimisation for Automated Detection of Blood Vessels from Digital Retinal Images*. *DIRASAT- Pure Sciences* (ISSN 1560-456X), Vol. 37, Issue 2, pp. 67-84, August, 2010..
13. Azzam Sleit, **Mousa AL-Akhras**, Inas Juma, Marwah Alian, *Applying Ordinal Association Rules for Cleansing Iq Data With Missing Values*, *The Journal of American Science* (ISSN 1545-1003), Vol. 5, Issue 3, pp. 52-62, June, 2009.
14. **Mousa T. AL-Akhras** and Iman M. ALMomani, *Design and Implementation of a SIP-based E-Learning System*. *International Journal of Internet Education (IJIE)* (ISSN 1687-6482), Vol. 4. July 2009.
15. **M. AL-Akhras**, H. Zedan, R. John, I. ALMomani, *Non-intrusive speech quality prediction in VoIP networks using a neural network approach*, *Neurocomputing* (ISSN 0925-2312), 72 (2009), pp. 2595-2608.

International Conferences

1. **Mousa AL-Akhras**, The Effect of Robotics Platforms on the Educational Performance of Undergraduate University Students, The First Arab Robotics Conference, 14-16 October, 2012, Amman, Jordan.
2. Iman ALMomani, **Mousa AL-Akhras**, Internet Skills in Scientific Research - In Arabic (مهارات استخدام الإنترنت في البحث العلمي), The Fifth Conference On Scientific Research in Jordan, 19 November, 2011, Amman, Jordan.
3. **Mousa AL-Akhras**, Maha Saadeh, Emad AL Mashakbeh, Heba Saadeh. Path Following and Obstacle Avoidance Fuzzy Controller for Mobile Indoor Robots. The 11th WSEAS International Conference on Robotics, Control and Manufacturing Technology (ROCOM '11), 8-10 March, 2011, Venice, Italy. ISBN: 978-960-474-283-7.
4. Iman Al Momani, Maha Saadeh, Hamzeh Al Jawawdeh, **Mousa AL-Akhras**. Energy Awareness Tree-Based Routing Protocol for Wireless Sensor Networks. The 10th WSEAS International Conference on Applied Computer and Applied Computational Science (ACACOS '11), 8-10 March, 2011, Venice, Italy. ISBN: 978-960-474-281-3.

5. **Mousa AL-Akhras** and Omar Daoud. Evaluating The NGN Performance Based On Duplicate Transmission Of Voice Packets. *Seventh International Multi-Conference on Systems, Signals & Devices (SSD'10)*, Vol. III: *The Conference on Communication & Signal Processing*, 27-30 June, 2010, Amman, Jordan. ISBN: 978-9973-959-25-6.
6. **Mousa AL-Akhras**, Khaled Daqrouq, and Abdul Rahman Al-Qawasmi. Perceptual Evaluation of Speech Enhancement. *Seventh International Multi-Conference on Systems, Signals & Devices (SSD'10)*, Vol. III: *The Conference on Communication & Signal Processing*, 27-30 June, 2010, Amman, Jordan. ISBN: 978-9973-959-25-6.
7. Marwah Alian and **Mousa AL-Akhras**. AdaLearn: An Adaptive E-Learning Environment. *The 2010 International Conference on Intelligent Semantic Web - Services and Applications (ISWSA 2010)*, 14-16 June, 2010, Amman, Jordan. ISSN 2218-1504. Proceedings ISBN: 978-1-4503-0475-7.
8. **Mousa AL-Akhras**. An Evolutionary-Optimised Artificial Neural Network Approach for Automatic Appraisal of Jordanian Lands and Real Properties. The 11th WSEAS International Conference NEURAL NETWORKS (NN'10), 13-15 June, 2010, Iasi, Romania. ISBN: 978-960-474-195-3. ISI
9. Iman Al-Momani, Asma' Abdel Aziz and **Mousa AL-Akhras**. Secure and Power Saving Routing Protocol For Wireless Sensor Networks. The 11th WSEAS International Conference on FUZZY SYSTEMS (FS'10), 13-15 June, 2010, Iasi, Romania. ISBN: 978-960-474-195-3. ISI
10. Heyam Bader, **Mousa Al-Akhras**, and Abdullatif Abu-Dalhoum, Improved Detection of Blood Vessels From Digital Retinal Images Using Optimised GABOR Filter, The 3rd Mosharaka International Conference on Communications, Computers and Applications (MIC-CCA 2009), 26-28 October, 2009, Amman, Jordan. ISBN: 978-9957-48607-5
11. **Mousa AL-Akhras** and Khalil El Hindi, Function Approximation Models for Non-Intrusive Prediction of VoIP Quality. *IADIS International Conference on Informatics (I 2009) - Special Session on Telecommunications, Networks and Systems 2009 (TNS 2009)*, 17-19 June, 2009, Algarve, Portugal. ISBN: 978-972-8924-86-7.
12. Khalil El Hindi and **Mousa AL-Akhras**, Eliminating Border Instance to Avoid Overfitting. *IADIS International Conference Intelligent Systems and Agents 2009 (ISA 2009)*, 21-23 June, 2009, Algarve, Portugal. ISBN: 978-972-8924-87-4.
13. **Mousa Al-Akhras**, Tutorial - Voice over IP - Technology & Challenges, *Mosharaka International Conference on Communications, Networking and Information Technology*, 5-7 December, 2008, Amman, Jordan.
14. Mohammed Alawairdhi, Hongji Yang, **Mousa AL-Akhras**, BlueCRM: A New Trend of Customer Relationship Management Systems, *12th IEEE International Workshop on Future Trends of Distributed Computing Systems, 2008. FTDCS '08*, pp.226-232, 21-23 Oct. 2008, China. ISBN: 978-0-7695-3377-3.
15. **Mousa AL-Akhras**, Wesam Almobaideen, Kareem Hdairis, Abdullah Al-Jaouni and Rami Al-Zeer, Remote conferencing using SIP protocol stack and Java APIs. The 7th International Internet Education Conference & Exhibition (ICT-Learn 2008), 7-9 October, 2008, Cairo, Egypt.
16. **Mousa Al-Akhras**, Voice over IP (VoIP) - Tutorial, *Mosharaka International Conference on Communications, Computers and Applications*, 8-10 August, 2008, Amman, Jordan. ISBN: 978-9957-486-03-7.
17. **Mousa Al-Akhras**, A Genetic Algorithm Approach for Voice Quality Prediction, *The 5th International Multi-Conference on Systems, Signals, and Devices, IEEE SSD'08*, Vol. III: *The Conference on Communication & Signal Processing*, 20-23 July, 2008 Amman – Jordan. ISBN: 978-9973-959-07-2.
18. I. Almomani and **M. Al-Akhras**, Statistical Speech Quality Prediction in Voice over IP Networks, *The 2008 International Conference on Communications in Computing (CIC'8: 14-17 July, 2008)*. Monte Carlo Resort, Las Vegas, Nevada, USA. ISBN: 1-60132-058-2. **Scopus**.
19. **M. AL-Akhras** and H. Zedan, Quality Estimation for Streamed VoIP Services, in *The 2nd European Young Researchers Workshop on Service Oriented Computing*, Leicester, UK, 11-12 June 2007.

Books

1. **Mousa AL-Akhras**, Measuring the Quality of VoIP Traffic, ISBN-13 978-3-639-30581-4, ISBN-10: 3639305817, VDM Publishing House Ltd., 2010.
2. **Mousa AL-Akhras** and Iman ALMomani, Internet Skills in Scientific Research, ISBN 978-9957-72-040-7, ZAMZAM publisher and distributor, Amman, Jordan, 2011.

Book Chapters

1. **Mousa AL-Akhras** and Iman ALMamani, VoIP Quality Assessment Technologies -Book: VoIP Technologies, edited by: Shigeru Kashihara, ISBN: 978-953-307-549-5, Publisher: InTech, Vienna, Austria. Publishing date: February 2011

Attended Conferences, Workshops, Training Courses with Certificates

Conferences

1. The 11th WSEAS International Conference on Robotics, Control and Manufacturing Technology (ROCOM '11), 8-10 March, 2011, Venice, Italy. **Author.**
2. The 10th WSEAS International Conference on Applied Computer and Applied Computational Science (ACACOS '11), 8-10 March, 2011, Venice, Italy –**Author + Session Chair.**
3. ICT 2010, 27-29 September, 2010, Brussels, Belgium – **Attendant.**
4. The 7th International Multi-Conference on Systems, Signals & Devices (SSD'10), 27-30 June, 2010, Amman, Jordan –**Author + Session Chair.**
5. The 11th WSEAS International Conference on NEURAL NETWORKS (NN'10), 13-15 June, 2010, Iasi, Romania. - **Session Chair.**
6. The 11th WSEAS International Conference on FUZZY SYSTEMS (FS'10), 13-15 June, 2010, Iasi, Romania. - **Author.**
7. The 11th WSEAS International Conference on EVOLUTIONARY COMPUTING (EC '10), 13-15 June, 2010, Iasi, Romania. - **Attendant.**
8. The 3rd Mosharaka International Conference on Communications, Networking and Information Technology (MIC-CNIT 2009), 21-23 December, 2009, Amman, Jordan – **Attendant.**
9. Mosharaka 3rd International Conference on Communications, Computers and Applications (MIC-CCA 2009), 26-28 October, 2009, Amman, Jordan - **Session Chair.**
10. IADIS International Conference on Informatics (I 2009), June 17-19, 2009, Algarve, Portugal – **Author.**
11. IADIS International Conference on E-Learning (eL 2009), June 17-19, 2009, Algarve, Portugal – **Attendant.**
12. Mosharaka International Conference on Communications, Networking and Information Technology, 5-7 December, 2008, Amman, Jordan- **Tutorial Presentation.**
13. The 7th International Internet Education Conference & Exhibition (ICT-Learn 2008), 7-9 October, 2008, Cairo, Egypt - **Author.**
14. International Arab Conference on e-Technology, October 15-16, 2008, Amman, Jordan – **Session Chair.**
15. Mosharaka International Conference on Communications, Computers and Applications, 8-10 August, 2008, Amman, Jordan- **Session Chair + Tutorial Presentation.**
16. The 4th International Workshop on Advanced Computation for Engineering Applications (ACEA08), Al-Balqa Applied University - Salt, Jordan, July 23-24, 2008– **Attendant.**
17. The 5th International Multi-Conference on Systems, Signals, and Devices, IEEE SSD'08, 20-23 July, Amman, Jordan – **Author.**
18. The 2nd European Young Researchers Workshop on Service Oriented Computing, 2007, Leicester, UK – **Author.**

Staff Training Courses – with certificates (The University of Jordan)

Design of Study Plan	6 Hours	15-16/1/2012
Teaching Strategies	12 Hours	17-22/1/2012
Effective Skills of University Teaching	12 Hours	23-26/1/2012
Learner's Assessment and Test Preparation	12 Hours	29/1-1/2/2012
Laws and Regulation of the University of Jordan	6 Hours	2-5/2/2012
University Work Ethics	2 Hours	6/2/2012

Workshops and Training Courses- with certificates

IAJIT Openconf – Conference Management Software- Zarqa Private University – Jordan	-28/02/2008
Technology Transfer Policies for Developing Countries-Islamabad-Pakistan	-12-17/10/2009
Proposal Writing Workshop, Centre for Educational Development, UoJ	- 22/02/2010
MS Academic Partners Workshop	- 07/09/2011

Research Training Program - with certificates (De Montfort University, UK)

Typesetting Documents Using LaTeX	-05/04/2006
Creating and Managing Large Documents	-04/04/2006
Effective Presentation Using PowerPoint	-27/03/2006
Using SPSS	-10/03/2006
Finishing Your Thesis and Preparing for the Viva	-09/03/2006
Managing Data Using Excel	-23/02/2006
Written Application Skills and Job Interview Skills	-14/06/2005
Writing For Publication	-20/06/2005
Presenting Your Research to and Audience	-02/03/2005
Research Methods	-22/10/2004-23/10/2004
Literature Searching and Reference Management	-23/06/2004
English Language for Academic Research Purposes	-22/06/2004
Intellectual Property Rights and Ethics	-15/06/2004
Writing Skills	-24/05/2004
Planning and Managing Research	-02/05/2004
Research Students Induction Event	-29/03/2004

Other Workshops

Writing Proposal for FP7 People Programme, given by Mr. Leonardo Piccinetti, the University of Jordan.
13/4/2010.

Software Training Courses

Developer 2000(Plsql, Forms4.5, Reports 2.5, Graphics 2.5), Aug -Oct 1998
ICDL
3DS

Committees

• The University of Jordan (2007 – Present):

Head of several tender committees.

1. Head of Tender Committee – Tender Number 325/2007. Installation of the new network infrastructure at the University of Jordan and Hospital.
2. Head of Tender Committee – Tender Number 325/2007 **Variation order**. Installation of the new network infrastructure at the University of Jordan and Hospital.
3. Head of Tender Committee – Tender Number 392/2008. Supply, installation, operation and maintenance of new security hardware for the University of Jordan Computer Center.
4. Head of Tender Committee – Tender Number 392/2008. Putting new specifications and requirements for new security hardware for the University of Jordan Computer Center.

• The University of Jordan, King Abdullah II School for Information Technology, (2007 – Present):

- Member of ABET Accreditation Committee.
- Member of the Scientific Research, Conferences, Seminars, and Expositions Committee.
- Member of the e-Learning Committee.
- Member of Scientific Week Committee.
- Member of the Supervising committee on Students Union's elections.
- Member of Faculty's Library Committee.
- Member of Social Committee.
- Member of Interaction with local society Committee.

• The University of Jordan, Computer Information Systems Department, (2007 – Present):

- Member of the Scientific Research, Conferences, Seminars, and Interaction with local society Committee.

- Member of the Higher Studies Committee.
- Member of the Appointment and Promotion Committee.
- Member of the M.Sc. Theses Examination Committees.
- Member of Social Committee.
- Member of the Training Committee.
- Member of the Students Counselling Committee.
- Member of the Curriculum Planning Committee which covers the study of:
 - Computing Curricula 2005 which covers undergraduate programs in: Computer Engineering, Computer Science, Information Systems, Information Technology, and Software Engineering. This standard was a cooperative project between the Association for Computing Machinery (ACM), the Association for Information Systems (AIS), and the Computer Society (IEEE-CS).
 - MSIS 2006: Model Curriculum and Guidelines for Graduate Degree Programs in Information Systems. This standard was a cooperative project between ACM and AIS.
 - IS 2002 and IS 2010 Curriculum Guidelines for Undergraduate Degree Programs in Information Systems. This standard was a cooperative project between ACM, AIS, and Association of Information Technology Professionals (AITP).

Technologies

- Visual Basic.Net
 - a. Building Desktop Financial Applications.
 - b. Web based Utilities and DLLs.
 - c. Working on Accounting, Inventory/Stores, Car Show System, and Repair Parts System.
- MATLAB®
- Active Server Pages (ASP.Net): Building Database web applications Projects with Oracle/SQL Server Back end database using 3-tier web architecture using MTS and IIS web server.
- SQL Server 2005, Interbase & Oracle:
 - a. Stored Procedures and Triggers.
 - b. Forms and Reports.
 - c. Database analysis and forward and reverse engineering.
- Crystal Reports:
- C++

Teaching

Previously Taught Courses

Artificial Intelligence and Expert Systems- Master
 Artificial Intelligence
 Database Concepts
 Distributed Systems
 Interpersonal Communication and Documentation
 E-Government Graduation Project
 Instructional Multimedia
 Operating Systems
 Computational Theory
 Special Topics (Voice over IP)-Master
 Visual Basic.Net
 Active Server Pages.Net
 IT Fundamentals
 Computer Skills-2

Master Thesis Committees – External Examiner:

Mohammad Salameh, Al-Balqa' Applied University, Analysis and Design of Landmine Detection System Using Mobile Devices. Supervisor: Prof. Alaa Sheta, Viva Date: 04/08/2008.

Master Thesis Committees – Internal Examiner - The University of Jordan:

Student Name	Title	Supervisor	Viva Date
Balkees Essa AlShagoor بلقيس عيسى الشقور	Analysis and Development of E-Health System for Chronic Disease Management Utilizing Adaptive Human-Computer Interaction Dialogues	Professor. Majid Al-Tae + Dr (Med) Ayman Zayed	30/7/2012
Lamya Omar Nasser Abdullah	Distributed Secure SIP Service over Ad Hoc Networks	Dr. Iman AlMomani	22/12/2011
Eman Mohammad Al-Thwaib	A Comparative Study of Machine Learning Techniques in Classifying Full-Text Arabic Documents Versus Summarized Documents	Dr. Khalil El-Hindi	05/08/2010
Majd Bassam Al-Ashhab	Automatic Test Data Generation Using Ant Colony Optimization	Dr. Khalil El-Hindi + Dr. Mohammad Alshraideh	03/08/2010
Asia Mosa Mohammed Al Saad	Mining Arabic Text Using Association Rules: The Holy Quran as a Case Study	Dr. Khalil El-Hindi + Dr. Bayan abu Shawar	13/05/2010
Oraib Yousef Al-Migdadi	A Spatial Data Structure for Tracking Mobile and Fixed Nodes	Dr. Azzam Sleit	06/08/2009
Dania Ahmad Mohammad Hlayyel	Recognizing Usage Patterns from Jordan University Website Using Self Organizing Map	Dr. Ammar Al Huneiti	14/05/2009
Inas Ismail Abuqaddom	Automated Reallocator of Replicas over Mobile Ad Hoc Networks	Dr. Azzam Sleit + Dr. Wesam Al-Mubaideen	12/05/2009
Badr-Aldeen Mustafa Mansour	Comparative Performance Study of Ultrasound Images Compression Dedicated to Telemedicine Application.	Dr. Abdel Latif Abu-Dalhoun	07/08/2008
Inas Juma	Detecting Fuzzy Duplicates Based on JEDS.	Dr. Azzam Sleit	05/08/2008

Master Thesis Supervision - The University of Jordan:

Student Name	Title	Co Supervisor	Proposal Approval Date	Viva Date
Asma' Abd Al-aziz Amro 8100095	Using Instance Reduction Techniques for Decision Trees Pruning	Dr.Khalil elHindi	10/1/2012	-
Sawsan AL Bakri 8090543	An Automated Diagnoses System Based On Blood Vessels Features	Dr.Bashir AlDiri Lincoln University, England	1/1/2011	26/12/2011
Lamia Hesham 8090765	Neuro-Fuzzy Classification Using Recursive Deterministic Perceptron	None	1/1/2011	26/7/2012
Ala' Ibrahim Barakat 8080811	Using Machine Learning Techniques to Diagnose Glaucoma Disease	None	1/1/2011	27/12/2011
Rodwan Shalalfeh 8060456	Best Utilization of Mirroring Server Resources using Artificial Neural Networks.	Dr.Azzam Sleit	23/12/2009	10/8/2011
Anas Liswi 8060437	Collaborative Mobile Learning Architecture Based on Mobile Agents	Dr.Iman AlMomani	18/05/2009	26/7/2010
Rami Khawaldeh 8070984	Ant Colony Optimization For VoIP Quality Assessment	Dr.Khalil elHindi	26/5/2009	15/7/2010
Dana Mostafa Beidas 8070972	Search in Multimedia Databases Using Similarity Distance	None	26/5/2009	13/5/2010
Ala' Fahad Aburumman 8071270	Securing SIP over Ad hoc network (Authentication)	Dr.Iman AlMomani	05/05/2009	5/8/2010

Heyam Bader 8062559	A Genetic Algorithm Gabor Filtered Optimization for Blood Vessels Detection of Digital Retinal Images.	Dr. Abdel Latif Abu-Dalhoum	02/11/2008	03/08/2009
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Supervised Graduation Projects per Year

2011/2012

Fall Semester

1. Haneen Ismail_0096673_Mohammad AL-Heet_0080782

Over Head Crane

Details: Most manufacturing plants contain warehouses as an essential place for storing, keeping and retrieving products. This process should ensure the safety of the goods; not to become defected, automating the process is the goal most leading industrial companies are aim for in several industrial fields. Our winching system aims to automate the process of storing and retrieving the products to save time and budget allocated for that purpose in an industry. The system consists of three primary hardware components that work together to achieve the system goals; the first component is the input device which contains sensing device to determine if there is a product to store, the output device which contains sensing device and assembly line to get the item out of the warehouse and finally the crane which moves in all direction to achieve its goal of moving the items from and to the warehouse.

2. Razan Ameen_0084593_Haneen Al-Bitar_0084636

Quick Solver: Incident Managements System

Details: Incident management system is part of the Service Support Functions of the ITIL which is the most widely adopted approach for IT Service Management in the world. It provides a practical framework for identifying, planning, delivering and supporting IT services to the business. Incident Management System is a very critical part in any organization that provides services or products to customers. It helps the organization to restore credibility. *Quick Solver* is a user-friendly, easy to use Incident Management System that meets all the Incident Management System requirements. Using our system it is now easier to record, classify, investigate and resolve Incidents like ITIL suggest.

3. Yaman Al-Kamaly_0071096

Moodie

Details: An intelligent mobile application that attempts to change user's mood through suggesting some places to visit. The suggestions are based on previous visits by the user, his/her rating, mood criterion, and nearby places to his/her current location. Moodie can also access the user's Facebook's account to access friends' locations and check in places, friends can also know his/her locations. Moodie was applied on Windows phone 7 utilising a number of services such as Bing maps, Silverlight, Windows Communication Foundation. Moodie can be extended to iOS and Android.

2010/2011

Fall Semester

1. Safaa Ahmad_0087479-Rawand Abu Roza_0080829

Neural Iris Signature Recognition (NISR)

Details: The idea of the project is to develop a system that is able to recognise people based on their iris image. The proposed system is based on an Artificial Neural Network model.

2009/2010

Spring Semester

1. Maisa Fuqaha_0086616-Diana el Qaisi 0059198

Intelligent Special Needs System

Details: The idea of the project is to help deaf people in communicating with normal people through a system designed to translate deaf people sign language into spoken sentences and to translate normal peoples' speech into signs understood by deaf people.

2. Rakan Al Yaman-Ruba Abu Hammour

Landmine Detection System

Details: The idea of the project is a prototype LEGO NXT robot developed to explore an area with landmines by using light and temperature sensors.

Fall Semester

1. Dua'a AlZawahra_2060084_Muna Fannoon_0067303_Sawsan Al Mahmoud_2060325

i-Bot System

Details: The idea of the project is to help in classification problems in a factory setting. In the proposed scenario there is a production belt where CANs of certain products (soda for example) are run over the belt. A robot arm will handle the CANs according to the following classification criteria (Appropriate or defected) and (Big or Small) and (Yellow or Orange). By doing so the proposed system helps in automating the processes in the factory rather than having a specialised factory worker(s) to do this repetitive task.

The system composed of the following components: A running belt, a robot arm that does the classification, two cameras that take shots of the current CAN and an Image processing component to help in the calculations. The pictures taken by the cameras are transferred to a computing device (a computer with image processing capabilities). Then the computer does certain calculations (image processing) to classify the current CAN. An order is then sent to the robot arm to do the classification appropriately

2. Mahmoud Yassin_0050718_Tariq Jahaf_2051619

Mobi-Shop

Details: A mobile agent based system to aid in quick navigation of different products within a shopping mall.

2008/2009

Summer Semester

1. Reem Al-Fayez_0067336_Rawan Al-Rihani_0068775

Details: E-School Management System

Spring Semester

1. Bayan Jamal Almemeh_0057432

KASIT Mobile Quiz

Details: Mobile Quiz using J2ME

2. Braah Kassab_0057430_Doaa Qwasmi_0057438_Hanady Abu-Lihyah_0057501_Taghreed Khresat_0057434

Details: Customer Relationship Management (Mobile Banking)

3. Eman AlBana_0050695_Razan Al-Ansari_2060063_Ola Al Siksik_0057465_Hana Al-Adham_0057500:

Mobi Lecture

Details: A mobile lecturing system to stream video lectures to mobile devices.

4. Yasmeen Hesham_0057504_Manal AlMunnayer_0057484

Map Builder using Robot Movement

Details: A system was built to track robot movement using LEGO NXT and MATLAB.

Fall Semester

1. Afnan Anaya-0057425:

Details: E-Conference Management System

2. Ala abdalaat-0057519-Hadeel Samara-0051302

Details: Copyrights Protection Tool: Secure PDF Reader (SPRS)

3. Mohammad Abu Qaoud-0056632-Hamzeh Elees-0057525

Dynamic Smart home system

Details: Build a smart House System involved hardware and software.

4. Noor Jaber-0057491-Rawan Abu Zaid-0057446

Robotics Library Assistance System (RLAS)

Details: A prototype for a library assistant was built using Lego NXT.

2007/2008

Spring Semester

1. Abdullah Jaouni_Kareem Meteb_Rami ElZeer

UJ Multimedia Conferencing Using Protocol

Details: Multimedia Voice and Video Conferencing System using SIP Protocol and Implemented Using Java programming language.

2. Amer Salameh_0031427

Details: Amman city GIS tourists guide

3. Zaid Rachwani_Ibraheem Hameed

Web-based TV broadcast

Details: Development of a Web-based IPTv streaming website.

Fall Semester

1. Students: Geith AlQurashi-0053151

Details: Development of a Microsoft SharePoint website