

# Resume

**Dr. Ibrahim Al-Oqily**

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**Hashemite University  
Zarqa, Jordan**



**Associate Prof.  
Computer Science/Networks**

## Summary

Three years vice dean of the IT faculty, chairman of computer information systems department, chairman of software engineering department, and chairman of computer science department. Seven years of professional experience in teaching university level courses, Two years of professional experience in teaching computer software, and four years professional experience in application development testing and system analyst.

## Education

- BS in Computer science, Mu'ta University, Alkarak, Jordan, 1989-1993 (Excellent)
- MSc. In computer science, Jordan University, Amman, Jordan, 2001-2003 (Very Good)  
**Thesis " A Robust Discrete Cosine Transformation-Based Watermarking Algorithm for Digital Images"**
- PHD. In computer science, Ottawa university, Ottawa, ON, Canada, 2004 – July 2008 (Excellent)  
**Thesis "Autonomous Management for Service Specific Overlay Networks"**

## **Professional academic experience**

**July 1993:** Programmer at Royal Jordanian Air Force

**August 2003:** Teaching assistant at the Hashemite University, Zarqa, Jordan.

**August 2004:** PH.D. Student, University of Ottawa. Canada (Taught several courses for undergrad such as java and multimedia, held several research assistant and teaching assistant positions)

**September 2008:** Assistant Professor, and chairman of software engineering department, Hashemite University, Jordan

**August 2009 - September 2010:** Assistant Professor, and chairman of computer science department, Hashemite University, Jordan

**September 2010 :** Assistant Professor, and Vice Dean of the Faculty of Prince Al-Hussein Bin Abdullah II For Information Technology (IT), Hashemite University, Jordan and a chairman of computer information systems department for several months in the same period. And conduct of the dean of the faculty for several weeks.

**September 2013- January 2014:** Assistant Professor, the Faculty of Prince Al-Hussein Bin Abdullah II For Information Technology (IT), Hashemite University, Jordan

**January 2014- September 2016:** Associate Professor, the Faculty of Prince Al-Hussein Bin Abdullah II For Information Technology (IT), Hashemite University, Jordan

**September 2016 – now:** Associate Professor, College of Computer & Information Systems, Al Yamamah University, Riyadh, KSA.

## **Professional none academic experience**

**July 1993 – April 2001:** Programmer.

**Aug 1993:** COBOL and Oracle programmer and a team member for developing supply management system.

**May 1994:** Network Administrator and a team member for developing local LANs, the project aimed at connecting several departments using a local area network, some of which has a different platforms (Unix, Windows), An Oracle database system used to collect different information from different systems (supply, maintenance, aircraft maintenance and personal information system). Major components of the system include but not limited to:

- Designing and implementing the network.
- Performing reliability tests.
- Designing and implementing the user interface (UI).

- Performing unit tests.
- Used: routers, switches, hubs, cabling system, oracle data base, UNIX, windows 95/98/NT, Novel Networks.

**July 1997:** Teaching various computer related topics –Microsoft office, windows 95/98/NT, TCP/IP, Networks, MS Access data base.

**October 1999:** Webmaster and a team member for designing and publishing web sites, using HTML, Java script, Adobe Photoshop, Netscape enterprise server and Windows NT.

**October 2000:** Instructor at Prince Fiasal Technical Collage (database fundamentals, MS Access, and introduction to computers for the IT class)

**September 2001:** University of Jordan/ MS Degree Program

### **Research interests**

- Digital forensics
- Autonomous and adaptive systems
- Parallel and distributed systems
- Highly parallel systems
- Networks management and policy based networks
- Mobile computing
- Overlay networks and service oriented systems
- Autonomic Computing
- Cloud computing

### **Courses taught**

- Computer Networks and Security
- Object oriented programming (Java, C++)
- Data Communications
- Data Management (Data base Systems)
- Digital Forensics and Investigations
- Innovative Solutions in Complex environments
- Data Structures
- Logic Design
- Operating Systems
- Multimedia programming
- Computer skills

### **Publications**

- Papers in refereed journals
  1. I. Al-Oqily and A. Karmouch, "A self-organizing composition towards autonomic overlay networks," *NOMS 2008 - 2008 IEEE Network Operations and Management Symposium*, Salvador, Bahia, 2008, pp. 287-294.
  2. Al-Oqily, A. Karmouch, "Towards Automating Overlay Networks Management", *Journal of Network and Computer Applications* (Elsevier), *Journal of Network and Computer Applications* 32 (2009),pp. 461-473, DOI information: 10.1016/j.jnca.2008.02.013.
  3. Ibrahim Al-Oqily and Ahmed Karmouch. 2011. A Decentralized Self-Organizing Service Composition for Autonomic Entities. *ACM Transactions on Autonomous and Adaptive Systems* 6, 1, Article 7

(February 2011), 18 pages.

4. Jawdat Alshaer, Ibrahim Al-Oqily, Sulieman Bani-Ahmad, and Adnan Alrabee, "Multicore Parallel Loosely Coupled Framework For Processing Mobile Objects," *Journal of Theoretical and Applied Information Technology*, pp 057 – 064, Vol 34. No. 1 – 2011
5. I. Al-oqily, A. Alshtnawi, K.M. Al-Aubidy, and M. Al-Refai, "Autonomic Multimedia Delivery Services Self-Configuration," *TRANSACTIONS ON Systems, Signals and Devices, Issues on Communication & Signal Processing*, Shaker Verlag, Germany, ISSN: 1861-5252, Vol. 6, No. 3, 2011.
6. Al-Oqily, I., Subaih, B., Bani-Mohammad, S., Alshaer, J. J., & Refai, M. (2012). Autonomic Healing for Service Specific Overlay Networks. *International Journal of Information Technology and Web Engineering (IJITWE)*, 7(2), 46-59, 2012 doi:10.4018/jitwe.2012040104
7. Al-Oqily, I., Alkhatib, G., Al-Khasawneh, A. and Alian, M. 'Social networks impact: the case of Jordan youth', *Int. J. Continuing Engineering Education and Life-Long Learning*, Vol. 23, No. 1, pp.100–114, 2013.
8. Mohammed Refai ; Ibrahim AL-Oqily ; Abed Alhamori, "Leader Election Algorithm in 3D Torus Networks with the Presence of One Link Failure," *World of Computer Science and Information Technology Journal*, Vol:2, Issu:2, pp. 90-97, 2012.
9. A.Alsarhan, E.E.Abdallah, I.Al-Oqily, and A.E.Abdallah, "An Economic Model for Resource Adaptation in 2D Mesh Multicomputer Networks," *International Journal of Computers and Their Applications (IJCA)*, Vol. 20, No. 1, March 2013.
10. Al-Oqily, I., Al-Aubidy, K., Alshtnawi, A. and Sarayrah, K. (2014)" An Efficient Media Ports Resource Discovery For Service Networks", *International Journal of Business Information Systems*
11. K.T.Al-Sarayreh, I.Al-Oqily, and K.Meridji, "A Standard-Based Reference Framework for System Operations Requirements," *Int. J. Computer Applications in Technology*, 2013.
12. Al-Oqily, A. Karmouch, "SORD: a Fault-Resilient Semantic Overlay for MediaPorts Resource Discovery," *IEEE Transactions on Parallel and Distributed Systems*, vol. 20, no. 8, pp. 1112-1125, August, 2009.
13. L. Al-Matarneh, A. Sheta, S. Bani-Ahmad, J.Alshaer, and I.Al-oqily, "Development of Temperature-based Weather Forecasting Models Using Neural Networks and Fuzzy Logic," *International Journal of Multimedia and Ubiquitous Engineering (IJMUE)*, Vol. 9, No. 12, pp. 343-366, 2014.
14. E.E.Abdallah, I.Al-Oqily, A.E.Abdallah, A.Alsarhan, A.F.Otoom, " Spectral Graph and Minimal Spanning Tree for 3D Polygonal Meshes Fingerprinting," *International Journal of Information Technology and Web Engineering (IJITWE)*, Vol 1, No.1, 2015.
15. A.E.Abdallah, M.Bsoul, E.E.Abdallah, I.Al-Oqily, George Kao, "Cluster Based online routing protocols for ad hoc network", *International Journal of Information Technology and Web Engineering (IJITWE)*, Vol 1, No.1, 2015.
16. I.Smadi, H.Najadat, I.Al-Oqily, "Evaluating The Importance Of The Weight

Factors In Dea Optimization", International Journal of Data Science, inderscience, Vol. 1, No. 2, 2015.

- Papers in Refereed Conference Proceedings

1. I. Al-Oqily, A. Karmouch, "Automating Overlay Networks Management," *aina*, pp. 386-393, *21st International Conference on Advanced Networking and Applications (AINA '07)*, May, 2007.
2. I. Al-Oqily and A. Karmouch, "A lightweight semantic overlay resource discovery," *2007 IEEE International Conference on Telecommunications and Malaysia International Conference on Communications*, Penang, 2007, pp. 702-707..
3. I. Al-Oqily, A. Karmouch, "Policy-Based Context-Aware Overlay Networks", *IEEE Global Information infrastructure symposia (GIIS'07)*. July, 2007.
4. I.Al-Oqily, A. Alshtnawi , K.M. Al-Aubidy, " Towards Self-Configurable Overlay Networks", *8th IEEE International Multi-Conference on Systems, Signals & Devices*, sousse, tunisia, pp. 1-6, March, 2011.
5. M.Refai and I.AL-Oqily,"Dynamic Solution For Leader Failure In Hypercube Network," *Proc. of the International Science and Technology Conference (ISTEC)*, Istanbul, 7-9 December 2011.
6. Al-oqily, I.; Subaih, B.; Bani-Mohammad, S.; Alshaer, J.J.; , "A survey for self-healing architectures and algorithms," *Systems, Signals and Devices (SSD), 2012 9th International Multi-Conference on* , Chemnitz, Germany, pp.1-5, 20-23 March 2012.
7. Khalid T. Al-Sarayreh, Ibrahim Al-Oqily, and Kenza Meridji, "A Standard Based Reference Framework for System Adaptation and Installation Requirements" *6<sup>th</sup> IEEE International Conference on Next Generation Mobile Applications, Services and Technologies (NGMAST2012)*, Paris, France, pp. 7-12, 12-14 Sept. 2012.
8. I.Al-Oqily, M.Alzboon, and H.Al-Shemery, And A.Alsarhan, " Towards Autonomic Overlay Self-Load Balancing ", *10th IEEE International Multi-Conference on Systems, Signals & Devices*, Hammamet, Tunisia, March, 2013.

9. I.Al-Oqily, M.Al-Shamaileh, and S.Oqeili "An Architecture for Social Ad-Hoc Networks," Proc. of the 2013 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), Amman, Jordan, 3-5 December, 2013.

- Book Chapters

1. Nazim Agoulmine, Autonomic Network Management Principles: From Concepts to applications, Academic Press, DEC 2010, ISBN: 9780123821904, Book chapter (2): I.Al-Oqily, A. Karmouch, "**Autonomic Overlay Network Architecture**".
2. Shah.S, Ilyas.M, and Mouftah.H, Pervasive Communications Handbook, CRC Press, Taylor & Francis Group. 2012. ISBN 978-1-4200-5109-4. Book chapter (4): J.Alkaraki, and I. Al-Oqily, "**On the Quality of Service Routing in Mobile Ad hoc Networks**".
3. Issa Tomayess, Isaias Pedro, and, Kommers, Piet. Social Networking and Education, Lecture Notes in Social Networks. Book chapter Al-Oqily Ibrahim and Alkhatib Ghazi, "**Social Networking Effects on Jordanian Students**", Springer International Publishing, P 271-289, 2016-01-01

### Projects

- Participate in the preparation of the draft "**National Information Security**", which aims to raise awareness about the importance of information security in Jordan at various levels, starting from schools and ending in private companies and banks, it also designed to raise the level of protection of workers in information technology and to research and prepare trained personnel to raise the level of protection in national institutions.
- Main researcher for the project "Seamless Mobility Management of Users and Services over Heterogeneous Networks" **funded by the Hashemite University**. End date Jun, 2012.
- Design and Implementation of Water Distribution System for Pipeline Monitoring and Protection in Jordan, **funded by the Hashemite University**. End date Sept, 2012
- Mobility Tracking and Prediction Using Data Mining Patterns in the Hashemite University Campus, **funded by the Hashemite University**. End date Sept, 2012
- Participated in the Tempus project "Reorient University Curricula to Address Sustainability (RUCAS) (**511118-TEMPUS-1-2010-1-GR-TEMPUS- JPCR**)".
- Participated in the Tempus project " Development of an Interdisciplinary Program on Climate Change and Sustainability Policy (CLIMASP) (**543879-TEMPUS-1-2013-1-GR-TEMPUS-JPCR**) ", Ends 2016.

### Talks

- University of Ottawa, April 2005, "Mobile computing future and challenges"
- Carleton University, March 2006, "Peer-to-peer networks and the management complexity"
- Hashemite University, April 2009, "Autonomic Computing: An Architecture for Multimedia Delivery Over SSONs"

## **Organized workshops and conferences**

Organized/participated in organizing the following conferences/workshops:

- 2015 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), Amman, Jordan, 3-5 Nov, 2015. A member in the organization committee, IT Track Chair and Publication chair.  
<http://ewh.ieee.org/conf/aeect/>
- The 7th International Conference of Computer Science & Information Technology (CSIT2015), Applied Science University, Amman, Jordan; March 18-19th, 2015. Conference program co-chair.
- 2013 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), Amman, Jordan, 3-5 December, 2013. A member in the organization committee, IT Track Chair and Publication chair.
- 2012 International Conference on Computer, Information and Telecommunication Systems (CITS2012), Amman, Jordan. May 14-16, 2012, A member in the organization committee
- 2011 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT) 6-8/12/2011, A member in the organization committee and a publication chair.
- Steering committee member of the IEEE Jordan Professional Activities Summit 2012, Hashemite University, 6-7/10/2012
- Organizing committee member and evaluation committee member of the fifth national technology parade, Hashemite University, 2012.
- Steering committee member of national colligate programming contest, Amman, 2012.
- The 1st IT Workshop On New Technologies in Computing Industry and Software Engineering Tools, Faculty of Prince Al-Hussein Bin Abdallah II for Information Technology (IT), Hashemite University. October, 2008
- The 2nd IT Workshop On New Technologies in Computing Industry and Software Engineering Tools, Faculty of Prince Al-Hussein Bin Abdallah II for Information Technology (IT), Hashemite University. November, 2009

## **Attended workshops and conferences**

- Partnership between the public and private sectors in the field of higher education and research and development, Jordan University, 27-28/11/2012.
- Proctoring the IEEEExtreme world contest, Jordan University, 20/10/2012.
- ICT Industry & Academia event, Amman, 24 Jun 2012.
- Attended the 9th IEEE International Multi-Conference on Systems, Signals and Devices, Germany, 20-23/03/2012.
- Attended the Regional Workshop on ESD University Curricula Review and Revision to Address Sustainable Development, 7-9/01/2012, Cairo, Egypt.
- Attended the workshop role of the private sector in the financing of scientific research, Arab University Union, 21-22/11/2011.
- Dialogue academia and the private sector to develop workforce, Amman, 20/7/2011.
- Attended the 8th IEEE International Multi-Conference on Systems, Signals and Devices, Tunis, 22-25/03/2011.
- The 14th Jordan Scientific week, Amman, 3-6/05/2009



- The Course Teaching and assessment technologies in higher education, Hashemite University, 18-22/09/2009.
- The first world conference on E-Learning and Blended Learning: strategic choice for Arab Universities, Philadelphia University, Amman, 13-15/11/2012.
- The course learning management system, virtual class room, capturing tools, authoring tools, Hashemite University, Zarqa, 27/01-03/02/2009

## **Committees**

I have participated in the following selected committees:

- IEEE Jordan Section Young Professionals (YP) Chair
- Head of the steering committee for Jordanian Collegiate Programming Contest (JCPC) <http://acmacpc.org/jordan>
- Head of the study plans committee at the department and faculty levels
- Head of Student guide committee, at the university level
- Higher IT committee, at the university level
- National center of security and forensics committee
- Oracle Academic partnership committee
- Head or a member in all departments (CSA, CIS, SWE) and the IT faculty committees.
- Committees investigating irregularities students and employees, faculty and university Level.
- Representing the faculty in the scientific research council, Hashemite university, 2010/2011, 2011/2012.
- Head of a committee for online exam to employ master students at the faculty.
- Head of the Standing Committee for the preparation of the technical specifications for tenders relating to the college
- Member of the committee in the safety and reliability of the information at the university level
- Head of the committee of the establishment of Microsoft Academy in the faculty
- Active participation in the Student Research Competition, Hashemite University.
- Coach for a group of teams in the National collegiate Programming Contest and ACM Global Competition

## **Reviewer**

- I served as a reviewer for many conferences and journals in the field of automation and autonomic computing.
- I have participated and attended many local and international conferences and workshops.

## **Awards**

- May 2008, IEEE student Award, NOMS conference, Brazil

- March 2010, the honor prize for the best paper in 2009, the ministry of higher education and research, Jordan
- May 2011, the first prize of the 4<sup>th</sup> national technology parade, Philadelphia University, Jordan.
- May 2012, the first prize of the 5<sup>th</sup> national technology parade, Hashemite University, Jordan.

### **Community service**

Through my work at the university I have participated in many events and activities and committees that have had an active role in the upgrade of information technology in the local community, including:

- Member of the National Committee for the competition ACM Jordanian collegiate programming contest, which was designed to extend the framework of participation to include the largest possible number of Jordanian public and private universities. We held several training camps in different parts of the Kingdom to upgrade students participating and their numbers to participate in the international competition.
- Participation in the Preparatory Committee in several prestigious scientific conferences held in Jordan in cooperation with the IEEE Society Jordan Branch, where I am an active member of the Assembly since 2006.
- A member of the Preparatory Committee for the National Information Technology Festival and a member of the Evaluation Committee in this important event which is held at the level of the Hashemite Kingdom of Jordan.
- Participation in several research projects that was aimed at the sustainable development in the Kingdom and supported by the National Tempus projects such as "redirect curriculum to achieve sustainable development", which aims to change teaching methods to focus on national problems and how to address them to bring awareness and sustainable development, and how to apply these concepts focusing on the problems of water, environment and child labor, among others.
- Academic advising for faculty graduates in the Hashemite University wishing to pursue higher studies in addition to linking students with industry which helped in facilitating their employment.
- Supervising several projects of interest to the local community.