Curriculum Vitae

Jalal Omer Atoum, Ph.D
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Professional Summary:
Highly experienced professor of Computer Science for more than 20 years carrying out research, teaching and administration. He is currently a Visiting Professor of Computer Science at Southern Arkansas University. Also, he has been involved in the development and launching of several undergraduate and graduate academic programs (such the M.S. program in Information System Security and Digital Criminology at PSUT-Jordan) in addition to holding various administration positions (Department Chair, Dean, and Vice President at PSUT). Finally, he had participated and led a team of CS faculty members that had prepared and maintained the ABET accreditation of the Computer Science program.

Education:
- **Ph.D., Computer Science**, University of Houston, USA, August 1993.
- **M.S., Computer Science**, The University of Texas at Arlington, USA, Dec. 1987.
- **B.S., Computer Science**, Yarmouk University, Irbid, Jordan, 1984.

Experience:
- Visiting Professor of Computer Science at Southern Arkansas University, Jan, 2016-Present.
- Adjunct instructor of Computer Science at University of North Texas at Dallas, Jan. 217-Present.
- Vice President for Administrative Affairs of PSUT, Sept. 214-Sept. 215.
- Dean of The King Hussein Faculty of Computing Sciences at PSUT, 2010-2014.
- Chairman of the Computer Science Department, PSUT, 2004-2005.
- Member of the Information Technology and Communication committee in the Scientific Research Support Fund Ministry of Higher Education and Scientific Research, 2012-2013.
- IT Consultant for the Minister of Education (Jordan) 2010-2012.
- IT Consultant for the Social Security Corporation (Jordan), 2010-present.
- NYiT (New York Institute of technology-Amman, Jordan), Assistant Dean/Coordinator of the Computer Science and Engineering Department. 2001-2009.
- Acting Dean – King Abdullah for Graduate Studies and Scientific Research. PSUT Royal Scientific Society.
- Jordanian High School Consultant for the MIS stream- Ministry of Education.
- Professor of Computer Science, PSUT, Jan. 2010 - Now.
- Associate Professor of Computer Science, PSUT, 2000- 2010.
- Assistant Professor, PSUT, 1995 - 2000.
- Assistant Professor, Yarmouk University, 1993 - 1995.
- Teaching Assistant, University of Houston, USA, 1990-1993.
- Teaching Assistant, The University of Texas at Arlington, USA, 1985-1988.

Recent Research Interest:
> Databases, Data Mining, Artificial Intelligence, Distributed Systems, Arabic Natural   Language Processing.

Courses Taught:
> Programming Language (e.g. C/C++, Java), Data Structure, Discrete Mathematics, Database Systems, Theory of Computation, Compiler Design, Operating Systems, Computer Networks, Artificial Intelligence, Decision Support Systems, Secure E-Commerce, Advanced Database Systems (graduate level), and Seminar/Research Methods (graduate level).

Publications:

1. Jalal Atoum and Ibrahim Yakti, "News Real Time Recommendation Framework For Websites Contents", submitted to the International Journal of Software Engineering and Its Applications.
2. Tariq Alwada'n, Omer Al-Zitawi, and Jalal Omer Atoum, "Cloud Computing: Privacy, Mobility and Resources Utilization", International Journal of Computer Trends and Technology (IJCTT), Vol. 41, No. 1, pp. 29-36, DOI: 10.14445/22312803/IJCTT-V41P106. ISSN:2231-2803, 2016.
3. Jalal Omer Atoum, "Approximate Functional Dependencies Mining Using Association Rules Specificity Interestingness Measure", British Journal of Mathematics & Computer Science, Vol. 15, No. 5, pp. 1-10, 2016.
4. Jalal Omer Atoum and Aalaa Albadarneh, "Color Image Segmentation Features and Techniques: A Comparative Study", Proceedings of the International Conference on Data Mining, Multimedia, Image Processing and their Applications (ICDMMIPA2016), Published by The Society of Digital Information and Wireless Communications (SDIWC) Kuala Lumpur, Malaysia, Sept. 06-08, pp 1-7, 2016.
5. Raed Al-Qura'n, Ali Hadi, Jalal Atoum, and Malek Al-Zewairi, "Ultrasurf Traffic Classification: Detection and Prevention", International Journal of Communications, Network and System Sciences (IJCNS). Vol. 8, No. 8, 2015, pp 304-311.
6. Suleiman J. Khitan, Ali Hadi, and Jalal Atoum, "Enhanced Analysis Method for Suspicious PDF Files", IJCSNS International Journal of Computer Science and Network Security, Vol. 15, No. 5, 2015, pp 32-38.
7. Malek Al-Zewairi, Ja'far Alqatawna, and Jalal Atoum, "Risk Adaptive Hybrid RFID Access control System", Security and Communication Networks 07/2015; Published online in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/sec.1303,
8. Alaeddin Almubayed, Ali Hadi, Jalal Atoum, "A Model for Detecting Tor Encrypted Traffic Using Supervised Machine Learning", International Journal of Computer Network and Information Security (IJCNIS), ISSN: 2074-9090. Vol. 7, No. 7, 2015, pp 10-23.
9. Mariam Khader, Ali Hadi, and Jalal Atoum, "A Novel Approach Covert Channel for Secret Communications", International Journal of Computers and Technology, Vol. 14, No. 2, 2014, pp 5479-5486, ISSN 2277-3061.
10. Jalal Atoum and Amer Qaralleh, "A Hybrid Technique for SQL Injection Attacks Detection and Prevention", International Journal of Database Management Systems (IJDMS), Vol. 6, No. 1, 2014, pp. 21-28.

11. Ishraq Al-Fataftah and Jalal Atoum, "An Enhanced Framework for Improving Spatio-Temporal Queries for Global Positioning Systems", International Journal of Research in Computer Science, Vol. l3, No.2, 2013, pp 11-21, doi:10.7815/ijorcs.32.2013.061.

12. Rawan Ghnemat, Ruba Zaghari, and Jalal Atoum, "Behavioral Segmentation For Web Searching Users using Self Organizing Kohonen Maps", The second International Conference on e-Technologies and Networks for development, (ICeND2013), Malaysia, March 4-5, 2013, pp 114-121.

13. Ashraf M. A. Ahmad, Ahlam Alqutami, and Jalal Atoum, "A Robust Algorithm for Arabic Video Text Detection", Proceeding of the 2011 2nd international congress on Computer Applications and Computational Science, Advances in intelligent and Soft Computing, Vol. 145, 2012, pp. 261-266, DOI:10.1007/978-3-642-28308-6-35.

14. Tamer Mehyar and Jalal Atoum, "An Enhancement on Content-Based Image Retrieval using Color and Texture Feature", Journal of Emerging Trends in Computing and Information Sciences, Vol. 3, No. 4, 2012, pp 488-496.

15. Kamel Shafa'amri and Jalal Atoum, "A Framework for Improving the Performance of Ontology Matching in Semantic Web", International Journal of Advanced Computer Science Application (IJACSA), Vol. 3, No. 1, 2012, pp 8-14.

16. Iyad A. Aldasouqi and Jalal Atoum, "Stream Processing Environmental Applications in Jordan Valley", IJCSS-International Journal of Computer Science and Security (IJCSS), Vol. 5, No. 1, 2011, pp 1-13.

17. Ashraf M. A. Ahmad, Ahlam Alqutami, and Jalal Atoum, "A Robust Algorithm for Video Arabic Text Detection", The 2011 2nd International Congress on Computer Applications and Computational Science (CACS 2011). 15-17 November 2011, Bali Dynasty Resort, Bali, Indonesia.

18. Jalal Atoum and Omar Faisal, "Distributed Black Box and Graveyards Defense Strategies Against Distributed Denial of Services", Proceedings of The 2nd International Conference on Computer Engineering and Applications (ICCEA 2010), IEEE Xplore Digital Library, Vol. 1, 2010, pp 87-91, Bali Island, Indonesia, March 26-29.

19. Jalal Atoum and Mamoun Al Rababaa, "Multiple Warehouses Scheduling Using Steady State Genetic Algorithms", International Arab Journal of Information Technology. Vol.7 No. 3, 2010, pp 310-316.

20. Farid Ibrahim and Jalal Omer Atoum , "Searching Vocalized/Unvocalized Arabic Texts Using an Improved Coding Schema", International Journal of Computer Processing Of Languages, Vol. 22, No. 4 , 2009, pp 269–283.

21. Jalal Atoum and Ayman Elholoul, "An Improved Efficient Personalized Data Mining Intrusion Detection System", in Proceedings of the International Conference on Information and Communication Systems ICICS'09, Amman, Jordan, Dec. 21-23, 2009, pp 115-119.

22. Jalal Atoum, "Mining Approximate Functional Dependencies from Databases Based on Minimal Cover and Equivalent Classes", European Journal of Scientific Research, Vol. 33, No. 2, 2009. pp 338-346. ISSN 1450-216X.

23. Suhail Oawis and Jalal Atoum, "New Method for Mutation Operator in Genetic Algorithms", Journal of Association for the Advancement of Modeling and Simulation Techniques in Enterprises, France. Vol. 14, No. 1-2, 2009, pp 17-26.

24. Naef Taher Al Rahedi and Jalal Atoum, "Solving The Traveling Salesman Problem Using New Operators in Genetic Algorithms", American Journal of Applied Sciences, Vol. 6, No. 8, 2009, pp 1586-1590.

25. Jalal Atoum, Dojanah Bader, and Arafat Awajan, "Mining Functional Dependency from Relational Databases Using Equivalent Classes and Minimal Cover", " Journal of Computer Science, Vol. 4, No. 5, 2008, pp 421-426, ISSN 1549-3636.

26. Irina Serguievskaia", Hasan Al-Sakran, and Jalal O.Atoum, "A Multi-Agent Experience Based e-Negotiation System", ICTTA '06 , 2nd IEEE International Conf. on Infor. And Communication Technologies: From Theory to application, ICITA '06, Dec. 24-28. 2006, Vol.1. pp 286-291. ISBN 07803-9521-2.

27. Jalal O. Atoum and Faisal al-Saqqar, "Detecting Parallelism in Rule-Based Programs Through Control Flow Analysis", ISIICT Second International Symposium on Innovation in Information & Communication Technology, April 21-22, 2004, pp 92-105.

28. Rawshan A. Basha, Jalal Omer Atoum, and Ali Thiab, "An Arabic Text Search Expert System" , 2001 International Conference on Artificial Intelligence (IC-AI'2001), Las Vegas, Nevada, (USA), June 25-28, 2001, pp 241-243.

29. Jalal O. Atoum and Farid M. S. Ibrahim, "Complexity Study of Two Developed Algorithms for Sorting Vocalized Arabic Words Using A New Coding Schema", Derasat Magazine, Jordan University, Vol. 27, No. 2, 2000, pp 226-234.

30. Jalal O. Atoum, "Graph-Based Complexity Analysis of Rule-Based Programs", Journal of Association for the Advancement of Modeling and Simulation Techniques in Enterprises, France, 2000.

31. Jalal O. Atoum , Farid M. S. Ibrahim and Suleman H. Mustfa, "The Influence of Vocalization Symbols on Sorting Algorithms in Arabic Texts", Journal of Institute of Mathematics and Computer Sciences (Computer Science Series), Vol. 10, No. 2, 1999, pp 155-169.

32. Jalal O. Atoum, "An Approach to Facilitate Rule-Based Programs Maintenance", Development and Practice of Artificial Intelligence Techniques (V. Bajic and D. Sha, Eds.), Proceedings of the IAAMSAD, South Africa, 1999, pp. 257-262.

33. Arafat Awajan, Jalal O. Atoum and Walid Salameh, "A Fast Arabic Text Compression Technique", Journal of Institute of Mathematics and Computer Sciences (Computer Science Series, Vol. 11, No. pp. 5-11, 1, 2000.

34. Jalal O. Atoum, "On the Control Flow Analysis of Rule-Based Programs", proceedings of the ICES-95, Dec. 1995, Amman Jordan, pp. 341-347.

35. Jalal O. Atoum , Farid M. S. Ibrahim and Suleman H. Mustfa , "Sorting Vocalized Arabic Words", proceedings of the IASTED, CSA, March, 1998, Irbid Jordan, pp 191-194.

36. Jalal O. Atoum, "On the Control Flow Analysis of Rule-Based Programs", "On the Control Flow Analysis of Rule-Based Programs", Dissertation, University of Houston, May 1993.

37. Jalal O. Atoum, "Buffering Techniques to Reduce Head Movements in Extendible Hashing with Organ Pipe Memory Structure", Master Project, University of Texas At Arlington, Dec., 1987.

Services- Professional Experiences:

1. At PSUT, I had participated and led a team of CS faculty members that had prepared and maintained the ABET accreditation of the Computer Science program.

2. Member of the Promotion and Appointment committee at PSUT, Sept. 2010-Sept.2105.
3. Had Lead several evaluation committees from the Higher Education Accreditation Commission for various academic programs at Jordanian Universities.
4. Participated in several European projects such as Tempus projects.
5. Organized, managed, and participated in several programming contests that had been held in Jordan and in the region such as the ACM programming contests.
6. Member of the steering Committee for the MENA_ET 2014 conference held in Amman, Jordan. April 15-17, 2014.
7. Lead the advisory committee for the development of the Master Program in Information System Security and Digital Criminology, PSUT, 2011. This program had won the Al Hassan Bin Talal prize for Scientific Distinction in 2012.
8. Jordanian High School Consultant for the MIS stream- Jordan Ministry of Education.
9. Member of the Committee on Research and Higher Education Between Jordanian Universities.
10. Supervised over thirty Master Thesis at PSUT and at other Jordanian universities.
11. Supervised Several PhD. Thesis at the Arab Academy.
12. I had been involved in several committees for degree plans, proposed Master programs, and as a member of various tenders for supplying computer equipment at Yarmouk University and at PSUT.
13. Attended and presented several papers at various conferences in Jordan and abroad.
14. Organizing committee member for The first international conference on E-Business and E-Learning **EBEL** 2005 (Amman, Jordan)
15. Organizing committee member for the International Conference on Information and Communication Systems ICICS'09.
16. A referee for many Conferences and Journals locally and internationally.
17. Supervised authoring the following Textbooks in Arabic for Ministry of Education:
    a. Computer Programming, Information Technology Track, Levels: One, Two and Three, 2006.
    b. Computer Programming, Information Technology Track, Levels: One and Two, 2005.

References:

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