

Ph.D.
CURRICULUM VITAE
August 2017



Name : Associate Professor Dr. Omaima Nazar Ahmad AL-Allaf

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AL-Zaytoonah University of Jordan,
Amman 11733, P.O Box: 130,
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Amman, Jordan

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University Education:

Ph.D., 2008 : Computer Information Systems, The Arab Academy for Banking and Financial Sciences, Amman, Jordan
Thesis title: A Proposed Hybrid Web Engineering Process Model for Large-Scale Web-Based Applications Development in Large Web Development Enterprises

M.Sc., 1999 : Computer Science, University of Mosul, Mosul, Iraq

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B.Sc., 1994 : Computer Science, University of Mosul, Mosul, Iraq

Employment:

15/2/2009 – Present : AL-Zaytoonah University of Jordan, Amman- Jordan (Associate Professor)

4/2/2005-15/2/2009: The Arab Academy for Banking and Financial Sciences, Amman – Jordan (Part Time Lecturer)

14/9/ 2000 -14/9/2004: Applied Sciences University (Private), Amman – Jordan (Teacher B)

28/12/1999-12/9/2000: University of Mosul, Mosul – Iraq (Assistant Lecturer)

31/10/1994- 28/12/1999: University of Mosul, Mosul – Iraq (Research Assistant)

Research and Publications:

Research Areas

- ✓ Image Processing (Compression, Recognition and Encryption)
- ✓ Artificial Intelligence
- ✓ Artificial Neural Networks
- ✓ Genetic Algorithms

Research Projects and Research Grants

List of Publications:

1. Omaila N. AL-Allaf and Saleh A. Khawatreh, **Guidelines for Using Multimedia in Webpage and User Interface Design**, Proceedings of the 4th International Multi Conference on Computer Science and Information Technology (CSIT2006), Applied Science University (Private), Amman, Jordan, Vol.3, Pages: 568-577, 5-7 April 2006.
2. Saleh A. Khawatreh and Omaila N. AL-Allaf, **Adaptive Scheduling Algorithm for Load Balance in a Multiprocessor System**, The 2nd Jordanian International Conference on Computer Science and Engineering (JICCSE2006), AL-Balqa' Applied University, Salt, Jordan, Pages: 385-393, 5-7 December 2006.
3. Saleh A. Khawatreh, Omaila N. AL-Allaf and Ghassan A. Al-Utaibi, **Impacts of Information Technology on Organizational Structures**, The 2nd Jordanian International Conference on Computer Science and Engineering (JICCSE2006), Al-Balqa' Applied University, Salt, Jordan, Pages: 394-399, 5-7 December 2006.
4. Omaila Nazar Ahmad AL-Allaf and Asim El-Sheikh, **Guidelines for Constructing Web Engineering Process Models for Developing Large-Scale Web-Based Applications**, The 1st International Conference on Digital Communications and Computer Applications (DCCA 2007), Jordan University of Science & Technology, Irbid, Jordan, Pages: 651-666, 19-22 March 2007.

Researches after PHD Degree

5. Omaila N. A. AL-Allaf, **XP-Prototyping Approach for User Interface Design of Large Web-Based Applications**, Proceedings of the IASTED International Conference, Software Engineering (SE 2010), 16-18 February, Pages: 218-225, 2010, Innsbruck, Austria. URL: <http://www.actapress.com/Abstract.aspx?paperId=37969>
6. Omaila N. A. AL-Allaf, **Improving the Performance of Backpropagation Neural Network Algorithm for Image Compression/Decompression System**, Journal of Computer Science, Vol.6, Issue.11, Pages: 1347-1354, 2010, <http://www.scipub.org>, DOI:10.3844/jcssp.2010.1347.1354.URL:[thescipub.com/pdf/10.3844/jcssp](http://www.scipub.com/pdf/10.3844/jcssp).
7. Omaila N. A. AL-Allaf, **The Adoption of Agile Processes in Large Web Development Enterprises: A Survey In Jordan**, International Journal of Web Applications, Vol. 2, No.3, Pages: 206-216, September 2010, ISSN: 0974 7710 (Print) 1911 7729, www.dirf.org/ijwa. URL: <http://www.dline.info/ijwa/v2n3.php>

8. Shahlla A. AbdAlKader and Omailma N. A. AL-Allaf, **Backpropagation Neural Network Algorithm for Forecasting Soil Temperatures Considering Many Aspects: A Comparison of Different Approaches**, The 5th International Conference on Information Technology (ICIT2011), AL-Zaytoonah University of Jordan, Amman – Jordan, 11-13 May 2011. URL: <http://www.zuj.edu.jo/conferences/TTC12/AllPapers/PA15.pdf>
9. Omailma N. A. AL-Allaf, **Codebook Enhancement in Vector Quantization Image Compression Using Backpropagation Neural Network**, Journal of Applied Sciences, Vol.11, No.17, Pages: 3152-3160, 2011, DOI: 10.3923/jas.2011.3152.3160, URL: <http://scialert.net/abstract/?doi=jas.2011.3152.3160>
10. Omailma N. A. AL-Allaf, **Fast BackPropagation Neural Network Algorithm for Reducing Convergence Time of BPNN Image Compression**, The 5th International conference on Information Technology and Multimedia (ICIM μ 2011), IEEEExplore, Pages:1-6, 14-16November2011, Kuala Lumpur, Malaysia. URL: <http://ieeexplore.ieee.org/xpl/articleDetails.jsp>
11. Omailma N. A. AL-Allaf and Shahlla A. AbdAlKader, **Nonlinear Autoregressive Neural Network for Estimation Soil Temperature: A Comparison of Different Optimization Neural Network Algorithms**, Ubiquitous Computing and Communication Journal (UBICC), Journal issue for ICIT2011, Vol.6, No. 4, Pages: 43-51, 23 October 2011. URL: <http://www.ubicc.org/files/pdf/>
12. Omailma N. A. Al-Allaf, **The Usage Of Capability Maturity Model Integration And Web Engineering Practices In Large Web Development Enterprises: An Empirical Study In Jordan**, Journal of Theoretical and Applied Information Technology (JATIT), E-ISSN 1817-3195, ISSN 1992-8645, Vol.39, Issue.2, Pages: 150-166, May 2012. URL: <http://www.jatit.org/volumes/Vol39No2/8Vol39No2.pdf>
13. Omailma N. Ahmad AL-Allaf, **Cascade-Forward vs. Function Fitting Neural Network for Improving Image Quality and Learning Time in Image Compression System**, World Congress on Engineering 2012 (WCE 2012), The 2012 International Conference of Signal and Image Engineering (ICSIE2012), Vol.2, Pages: 1-7, Imperial College London, in London, U.K, 4-6 July 2012, URL: http://www.iaeng.org/publication/WCE2012/WCE2012_pp1172-1178.pdf
14. Omailma N. Ahmad AL-Allaf, Abdelfatah Aref Tamimi, and Shahlla A. AbdAlKader, **Artificial Neural Networks for Iris Recognition System: Comparisons between Different Models, Architectures and Algorithms**, International Journal of Information and Communication Technology Research (IJICTR), Vol.2, No.10, October 2012, Pages: 744-752, ISSN 2223-4985, URL: http://esjournals.org/journaloftechnology/archive/vol2no10/vol2no10_1.pdf
15. Omailma N. Ahmad AL-Allaf and Shahlla A. AbdAlKader, **Genetic Algorithm Based on Parallel Computing to Improve the Performance of Fractal Image Compression System**, European Journal of Scientific Research, ISSN 1450-216X Vol. 92 No 2 December, 2012, pp.172-183, EuroJournals Publishing, Inc. 2012, <http://www.europeanjournalofscientificresearch.com>
16. Omailma N. Ahmad AL-Allaf, Shahlla A. AbdAlKader, and Abdelfatah Aref Tamimi, **Pattern Recognition Neural Network For Improving The Performance Of Iris Recognition System**, The International Journal of Scientific & Engineering Research (IJSER), Vol.4, Issue.6, Pages: 661-667, June 2013, ISSN 2229-5518, DOI:10.14299/000000, URL: <http://www.ijser.org/>

17. Omaima N. A. AL-Allaf, Abdelfatah Aref Tamimi and Mohammad A. Alia, **Face Recognition System Based on Different Artificial Neural Networks Models and Training Algorithms**, International Journal of Advanced Computer Science and Application (IJACSA), Vol. 4, Issue. 6, Pages: 40-47, Jun 2013, URL: www.ijacsa.thesai.org, U.S ISSN: 2156-5570, DOI: : 10.14569/issn.2156-5570, URL:<http://thesai.org/Publications/ViewIssue?volume=4&issue =6&code=IJACSA>
18. Omaima N. A. AL-Allaf, **Hybrid Web Engineering Process Model for the Development of Large Scale Web Applications**, Journal of Theoretical and Applied Information Technology (JATIT), E-ISSN 1817-3195, ISSN 1992-8645, Vol.53, Issue.1, pp:131-140, 10th July2013. URL: <http://www.jatit.org>
19. Abdelfatah A. Tamimi, Ayman M. Abdalla, and Omaima Al- Allaf, **Hiding an Image inside another Image Using Variable-Rate Steganography**, International Journal of Advanced Computer Science and Application (IJACSA), Vol. 4, Issue. 10, Pages: 18-21, November 2013, DOI: 10.14569/issn.2156-5570, URL: www.ijacsa.thesai.org, U.S ISSN: 2156-5570, URL:<http://thesai.org/Publications/ViewIssue?volume=4&issue =6&code=IJACSA>
20. Mohammad A. Alia, Abdelfatah Aref Tamimi and Omaima N. A. AL-Allaf, **Integrated System for Monitoring and Recognizing Students During Class Session**, AIRCC's : International Journal of Multimedia & Its Applications (IJMA), Vol.5, No.6, December 2013, pp:45-52, DOI : 10.5121/ijma.2013.5604, airccse.org/journal/ijma.html
21. Omaima N. A. AL-Allaf, **Review of Face Detection Systems Based Artificial Neural Networks Algorithms**, AIRCC's: International Journal of Multimedia & Its Applications (IJMA), Vol.6, No.1, February2014, pp:1-16, DOI : 10.5121/ijma.2013.6101. airccse.org/journal/ijma.html
22. Omaima N. Ahmad AL-Allaf, **ParFor and Co-Distributor Parallel Approaches for Implementing Fractal Image Compression Based Genetic Algorithm**, IEEE Technically Co-Sponsored Science and Information Conference 2014, pp: 345 - 350, August 27-29, 2014, London, UK, DIO: 10.1109/SAI.2014.6918209, www.conference.thesai.org.
23. Mohammad A. Alia, Abdelfatah Aref Tamimi, and Omaima N. A. AL-Allaf, **Cryptography Based Authentication Methods**, Proceedings of the World Congress on Engineering and Computer Science 2014 Vol I, WCECS 2014, 22-24 October, 2014, San Francisco, USA, ISBN: 978-988-19252-0-6, ISSN: 2078-0958 (Print); ISSN: 2078-0966 (Online).
24. Omaima N. Ahmad AL-Allaf, **Performance Analysis of MATLAB Parallel Computing Approaches to Implement Genetic Algorithm for Image Compression**, chapter 25, pp:397-425, Springer International Publishing Switzerland 2015, K. Arai et al. (eds.), Intelligent Systems in Science and Information 2014, Studies in Computational Intelligence 591, DOI 10.1007/978-3-319-14654-6_25.
25. Abdelfatah Aref Tamimi, Omaima N. A. AL-Allaf and Mohammad A. Alia, **Eigen Faces and Principle Component Analysis for Face Recognition Systems: A Comparative Study**, International Journal Of Computers & Technology (IJCT), Vol.14, No.4., 2015, pp:5650-5660, www.ijctonline.com, 28Feb2015.

26. Abdelfatah Aref Tamimi, Omaima N. A. AL-Allaf and Mohammad A. Alia, **Real-Time Group Face-Detection for an Intelligent Class-Attendance System**, International Journal of Information Technology and Computer Science (IJITCS), Vol.7, No.6, pp: 66-73, May 2015, MECS (<http://www.mecs-press.org/>) DOI: 10.5815/ijitcs.2015.06.09, ISSN Print: 2074-9007, ISSN Online: 2074-9015.
27. Shahlla A. AbdAlKader and Omaima N. Ahmad AL-Allaf, **Particle Swarm Optimization Based Discrete Cosine Transform for Person Identification by Gait Recognition**, The 7th International Conference on Information Technology (ICIT 2015), AlZaytoonah University of Jordan, Amman, Jordan, pp:156-163, 12 May 2015, doi:10.15849/icit.2015.0023 © ICIT 2015 (<http://icit.zuj.edu.jo/ICIT15>)
28. Omaima N. Ahmad AL-Allaf, Shahlla A. AbdAlKader, **Performance Analysis of Different Feature Extraction Algorithms Used with Particle Swarm Optimization for Gait Recognition System**, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-4, Issue-2, pp:23-30, 19 May 2015, Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.
29. Omaima N. A. AL-Allaf , **Removing Noise from Speech Signals Using Different Approaches of Artificial Neural Networks**, I.J. Information Technology and Computer Science, 2015, Vol.7, No.7, pp:8-18, Online June 2015 in MECS (<http://www.mecs-press.org/>) DOI: 10.5815/ijitcs.2015.07.02.
30. Omaima N. Ahmad AL-Allaf, **Improving the Performance of Particle Swarm Optimization for Iris Recognition System Using Independent Component Analysis**, The 2015 World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'15) The 17th International Conference on Artificial Intelligence, (ICAI'15), July 27-30, 2015, Las Vegas, USA)
31. Omaima N. A. AlAllaf, **Particle Swarm Optimization For Optimizing Learning Parameters Of Function Fitting Artificial Neural Network For Speech Signal Enhancement**, Journal Of Theoretical And Applied Information Technology, 15th June 2017, Vol.95. No. 11 2017, <Http://Www.Jatit.Org/Volumes/Ninetyfive11.Php>.
32. Omaima N. Ahmad AL-Allaf, **Particle Swarm Optimization Algorithm vs. Genetic Algorithm for Image Watermarking Based Discrete Wavelet Transform**, International Scientific Committee and Editorial Review Board on Computer and Systems Engineering, World Academy of Science, Engineering and Technology, **ICIP 2017: 19th International Conference on Image Processing**, 21-22/9/2017, <https://www.waset.org/conference/2017/09/paris/ICIP>

Teaching and Supervision

Teaching Experience

1. Fortran Programming Language
2. Basic Programming Language
3. Pascal Programming Language
4. C and C++ Programming Language
5. Prolog Programming Language
6. Computer Skills (I) : (Windows XP, Microsoft Office)

7. Computer Skills (II)- (Microsoft Access)
8. Computer Ethics
9. DataBase (SQL)
10. Visual Basic Programming Language
11. Java Programming Language
12. Electronic Business
13. Object Oriented Programming (in C++, in Java)
14. Data Structures and Algorithms (in C++, in Java)
15. Web Development-I (HTML, XHTML and VBScript)
16. Web Development-II (JavaScript, ASP.NET, ADO.NET)
17. Web Site Programming (ASP.Net)
18. Artificial Intelligence and Expert Systems
19. Network Programming (JAVA)
20. Information Technology
21. Computer Networks (II)
22. System Analysis and Design
23. Network Administration
24. MultiMedia
25. Computer Graphics
26. Strategies of Information systems
27. Project Management
28. Digital Image Processing

Professional Activities:

Journals and Conferences Reviewer:

1. The IASTED International Conference on Software Engineering (SE 2010), Innsbruck, Austria, 16-18 February 2010. <http://www.iasted.org/>
2. The Second International Conference on Networked Digital Technologies (NDT 2010), Charles University, Prague, Czech Republic, 7-9 July 2010. www.dirf.org/ndt2010 .
3. The 2010 International Conference on Informatics, Cybernetics, and Computer Applications (ICICCA2010), Bangalore, India, 19-21 July 2010. <http://www.dirf.org/icca2010>
4. The 2010 International conference on the Business and Digital Enterprises (ICBDE 2010), Gopalan Educational Society, Bangalore, India, 19-21 July 2010. <http://dline.info/icbde2010>
5. The First International Conference on Integrated Intelligent Computing (ICIIC 2010), SJB Institute of Technology, Kengeri, Bangalore, India, 05-07 August 2010. <http://www.dline.info/iciic2010>
6. The International Conference on Digital Information and Communication Technology (DICTAP2011), Dijon, France, 21-23 June 2011 (Program Committee)
7. The International Conference on Digital Information Processing and Communications (ICDIPC2011), VSB-Technical University of Ostrava, Ostrava, the Czech Republic. 7-9 July 2011. <http://www.sdiwc.net/cz>
8. The International Conference on Digital Enterprise and Information Systems (DEIS2011), London, 20-22 July 2011.

9. Membership of the International Association of Engineers (IAENG), www.iaeng.org, IAENG membership number is: 109666, Membership Date: 1Nov 2010.
- 10.The World Congress on E-Commerce and Business on the Web (WCEBW2012), London Metropolitan University, London, U.K, Aug. 27-29, 2012.
- 11.Membership of the Science and Information Organization (SAI), The SAI Organization Inc, Hillside Avenue, New York, 11432, USA, [www. http://thesai.org/](http://thesai.org/)
- 12.International Journal of Advanced Computer Science and Applications (IJACSA), United States of America, by the U.S. ISSN Center, Library of Congress under the ISSN: 2156-5570(Online).
- 13.Reviewer in the 7th International Conference on Information Technology, ICIT2015, AL-Zaytoonah University of Jordan, Amman – Jordan, 10-12 May, 2015.
- 14.Reviewer in the 8th International Conference on Information Technology, ICIT2017, AL-Zaytoonah University of Jordan, Amman – Jordan, 10-12 May, 2017.

Program Committee:

1. Coordinator of AL-Zaytoonah University with Microsoft Innovation Centre (MIC) in Amman-Jordan (first semester2009-2010 to first semester 2011-2012).
2. Technical Committee in the 1st Information Technology Colloquium, Computer Information Systems Department, Al-Zaytoonah University of Jordan, Amman – Jordan, 17-4-2010.
3. Organizing Committe and Technical Committee in the 5th International Conference on Information Technology, ICIT2011, AL-Zaytoonah University of Jordan, Amman – Jordan, 11-13 May, 2011.
4. Organizing Committee in the 2nd Information Technology Colloquium, Computer Information Systems Department, Al-Zaytoonah University of Jordan, Amman – Jordan, 17-4-2012.
5. Organizing Committe and Technical Committee in the 6th International Conference on Information Technology, ICIT2013, AL-Zaytoonah University of Jordan, Amman – Jordan, 8-10 May, 2013.
6. International Program Committees in The 2014 International Conference on Computational Science and Computational Intelligence (CSCI'14), American Council on Science and Education, IEEE CPS, March 10-13, 2014, Las Vegas, USA, URL: [http:// www. americancse. org/ ev ent s/ csci201](http://www.americancse.org/event/s/csci201)
7. Technical Committee in the IASTED, SEA, International Conference Series in Marina del Rey, USA, October 26 – 27, 2015.
8. International Scientific Committee and Editorial Review Board on Computer and Systems Engineering, World Academy of Science, Engineering and Technology, ICIP 2017: 19th International Conference on Image Processing, 21-22/9/2017, <https://www.waset.org/conference/2017/09/paris/ICIP>

Dr. Omaima N. Al-Allaf
Date: 4 August2017

