**PERSONAL INFORMATION**

Family name, First name: *Ashour, Wesam*

Date of birth: *26 June, 1977*

URL for web site: [*http://site.iugaza.edu.ps/washour/*](http://site.iugaza.edu.ps/washour/)

* **EDUCATION**

01/09/2005 – 01/07/2008 PhD School of Computing, The University of the West of Scotland, UK

29/09/2003 – 12/11/2004 Master School of Engineering, The University of Birmingham, UK.

 (Distinction, top two students, prize of best MSc project)

15/09/1995 – 01/09/2000 BSc Computer Engineering Dept., Islamic University of Gaza, Palestine.

* **CURRENT POSITION(S)**
* 15/08/2015 – now Assistant Vice President for Research and Postgraduate affairs, Islamic University of Gaza.

* **PREVIOUS POSITIONS**
* 16/08/2013 – 14/08/2015 Head of Computer Engineering Dept, Islamic University of Gaza (IUG), Palestine
* 15/08/2012 – 20/07/2013 Research fellowship funded by Arab Fund for Economic and Social Development
* 16/02/2015 – now Associate Professor, Computer Eng. Dept., Islamic University of Gaza, Palestine
* 16/08/2008 – 16/02/2015 Assistant Professor, Computer Eng. Dept., Islamic University of Gaza, Palestine
* 16/08/2009 – 16/08/2010 Head of Computer Engineering Dept, Islamic University of Gaza (IUG), Palestine
* 16/08/2008 – 16/08/2009 Assistant Professor, Computer Eng. Dept., Islamic University of Gaza, Palestine
* 01/09/2004 – 15/08/2005 Lecturer, Computer Eng. Dept., Islamic University of Gaza, Palestine
* 15/02/2001 –15/09/2003 Teaching Assistant, Computer Eng. Dept., Islamic University of Gaza, Palestine
* **FELLOWSHIPS AND AWARDS**
* “Zamalah” fellowship (3 months) to visit the University of the West of Scotland (UWS) in summer 2016, funded by Bank of Palestine.
* Research fellowship to TU- Berlin Univ. (June-August 2015) funded by DAAD fellowship (German Org.).
* The Distinguished Student Award of the Arab Fund Fellowship Program – Arab Fund for Economic and Social Development 2012.
* Studentship for MSc (2003-2004) from “Saudi Committee to help Palestinian nation”, Saudi Arabia.
* Prize for the best MSc project (2003/2004, Electronic, Electrical and Computer Engineering) from the University of Birmingham, UK.
* Studentship for PhD from the University of the West of Scotland, UK
* Grant ($4500) for PhD (2006) from Arab Student Aid International – ASAI
* The Hisham Hijjawi Award for Applied Sciences 2011 to MSc dissertation of my MSc student- Motaz Saad.
* **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**
* 01/09/2010 – 01/09/2016, I have supervised 12 Master Students, and evaluated and examined proposals and thesis for over 20 Master students, IUG. Our students in Master program need to do one year research project.
* **TEACHING ACTIVITIES (if applicable)**
* 16/08/2008 – now, Teaching and Lecturing at Computer Eng. Dept., Islamic Univ. of Gaza (IUG), Palestine
* I taught last year (BSc: Digital Design, Computer architecture, Compiler design. MSc: selected topics in AI, clustering Algorithms.)
* **ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)**
* 10-15/10/2010, The 3rd Inter. Conference for Engineering and Reconstructing Gaza, IUG. Organising Committee.
* 08-09/12/2014, The 5th International Conference on Engineering and Sustainability, IUG. Organising Committee.
* 16-19/04/2016, The 1st IUG Research Week. Head of organising committee.
* 30-31/08/2016, The International Conference on Smart Cities Solutions (ICSCS), IUG. Organising Committee.
* **INSTITUTIONAL RESPONSIBILITIES (if applicable)**

During my work in Computer Engineering Dept, in Islamic University of Gaza, I have been allocated many different responsibilities and have joined many different committees to develop and enhance our faculty. For example, I have been an active member in: Faculty council, Foreign relations Committee, MSc development Committee, Quality Committee, Research Committee, Strategic and Planning Committee, etc. Also, I have organised lots of continuous internal and external scientific seminars for staff and students. Some professors from Europe have given us seminars through the video conference.

* **COMMISSIONS OF TRUST (if applicable)**

I have been a reviewer/ member of program committees for the following:

* The Journal of the Pattern Recognition Society, Elsevier.
* International Journal of Geographical Information Science IJGIS, Australia
* Journal of Engineering Research and Technology JERT, IUG, Palestine
* The 12thInternational Conference on Intelligent Data Engineering and Automated Learning *–* [IDEAL 2011, UK](http://www.uea.ac.uk/ideal2011)
* The 5th International Conference on Information Technology (ICIT 2011), Jordan
* The Conference of the Spanish Association for Artificial Intelligence 2011,[CAEPIA’ 2011](http://www.caepia11.es/index.php?lang=en), Spain
* The 3rd International Conference for Engineering and reconstructing Gaza – organizing committee
* The 11thInternational Conference on Intelligent Data Engineering and Automated Learning *–* [IDEAL 2010, UK](http://ideal2010.ucc.ie/Committees.html)
* The Twenty Third International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems [IEA-AIE 2010, Spain](http://www.iea-aie2010.org/)
* **MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)**

15/09/2005 – 15/09/2008, Researcher in [*Applied Computational Intelligence Research Unit*](http://cis.uws.ac.uk/research/ann/index.html), School of Engineering and Computing, [University of the West of Scotland](http://www.uws.ac.uk/), UK.

2008 – till now Computer Engineering Department, Islamic University of Gaza.

**Others:**

Feb 2010, I have organised a workshop to setup ways of cooperation and collaboration between different academic units. Participant: Prof. Hany Ammar (Univ. of West Virginia, US), Prof. Ali Mili ([New Jersey Institute of Technology](http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCAQFjAA&url=http%3A%2F%2Fweb.njit.edu%2F~mili%2F&ei=82LOU8aTPLDP4QSInYHgCw&usg=AFQjCNHDu4gJmds7R3PEtLW5qD7VH771HQ&bvm=bv.71198958,d.bGQ)), and others from Tunisia, Egypt and Oman.

**Google Scholar citation:**

<http://scholar.google.com/citations?user=2JPPrH4AAAAJ&hl=en>



***20-01-2017***

## Publications:

***Refereed Journals***

[43] Naser S. A. Abusulaiman and Wesam M Ashour, " Infected Part Detection based on Affinity Propagation Clustering ", [International Journal of Software Engineering and Its Applications (IJSEIA),](http://www.sersc.org/journals/IJSEIA/) vol. 10, no. 7, pp. 39-52 (2016), ISSN: 1738-9984. <http://dx.doi.org/10.14257/ijseia.2016.10.7.05>.

 [42] Wesam M. Ashour, Abdallatif S. Abu-Issa and Olaf Hellwich, "Clustering Algorithms in Echo State Networks ", [*International Journal of Signal Processing, Image Processing and Pattern Recognition IJSIP*](http://www.sersc.org/journals/IJSIP/)**,** vol. 9, no. 5, pp. 15-24. ISSN: 2005-4254. <http://dx.doi.org/10.14257/ijsip.2016.9.5.02>.

[41] Hamza Naji and Wesam Ashour, “Text Classification for Arabic Words Using Rep-Tree”, [International Journal of Computer Science and Information Technology (IJCSIT)](http://airccse.org/journal/ijcsit.html), 8 (2): 103 – 110 (2016), ISSN 0975 3826, DOI:10.5121/ijcsit.2016.8208.

 [40] Ahmed M. Serdah and Wesam M. Ashour, "Clustering Large-Scale Data Based on Modified Affinity Propagation Algorithm," [*Journal of Artificial Intelligence and Soft Computing Research JAISCR*](http://jaiscr.eu/), Vol.6, No. 1, pp. 23 -33, DOI 10.1515/jaiscr-2016-0003, 2015, ISSN 2083-2567.

[39] Ahmad El-Samak and Wesam M. Ashour, "OPTIMIZATION OF TRAVELING SALESMAN PROBLEM USING AFFINITY PROPAGATION CLUSTERING AND GENETIC ALGORITHM," [*Journal of Artificial Intelligence and Soft Computing Research JAISCR*](http://jaiscr.eu/), Vol. 5, No. 4, pp. 239 -245, DOI 10.1515/jaiscr-2015-0032, 2015, ISSN 2083-2567.

 [38] Mohammed R. El Khoudary, Wesam M. Ashour, "Design and Implementation of a Selective Continuous Test Runner,” *International Journal of Artificial Intelligence and Application for Smart Devices IJAIASD*, 2(2): pp.23-38, http://dx.doi.org/10.14257/ijaiasd.2014.2.2.03, ISSN: 2288-6710, SERSC 2014.

[37] Nidal Ismael, Mahmoud Alzaalan, Wesam M. Ashour, "Improved Multi Threshold Birch Clustering Algorithm,” *International Journal of Artificial Intelligence and Application for Smart Devices IJAIASD***,** 2(1): pp.1-10, 2014.

[36] Kanaan El-Bhissy, Fadi El-Faleet, Wesam M. Ashour, "Spectral Clustering Using Optimized Gaussian Kernel Function,” *International Journal of Artificial Intelligence and Application for Smart Devices IJAIASD***,** 2(1): pp.41-56, 2014.

[35] Raed T. Aldahdooh and Wesam M. Ashour, "DSMK-means 'Density Based Split and Merge K-means Clustering Algorithm'," [*Journal of Artificial Intelligence and Soft Computing Research JAISCR*](http://jaiscr.eu/), volume 3, number 1, 2013.

[34] Wesam M. Ashour, Tzai Der Wang and Colin Fyfe, "Reservoir Computing and Data Visualisation," [Journal of Artificial Intelligence and Soft Computing Research JAISCR](http://jaiscr.eu/)*,* volume 2, number 3, 2013.

[33] Wesam Ashour and Colin Fyfe, “Improving Bregman k-means,” [International Journal of Data Mining, Modelling and Management (IJDMMM),](http://www.inderscience.com/browse/index.php?journalCODE=ijdmmm) 6(1): 65 -82. DOI: 10.1504/IJDMMM.2014.059981, Inderscience 2014.

[32] Wesam M. Ashour and Colin Fyfe, "Visualising Data Using Reservoir with Clustering", *International Journal of Artificial Intelligence and Application for Smart Devices IJAIASD***,** 1(1): pp.25-40, 2013. SERSC, ISSN: 2288-6710.

[31] Faten Abu Shmmala and Wesam M. Ashour, "Color Based Image Segmentation using Different Versions of K-Means in two Spaces", *Global Advanced Research Journal of Engineering, Technology and Innovation (GARJETI)*. 1(1):030-041, 2013. ISSN: 2315-5124.

[30] Mohammed Elbatta and Wesam M. Ashour," A dynamic Method for Discovering Density Varied Clusters", *International Journal of Signal Processing, Image Processing and Pattern Recognition***,** vol. 6, no. 1, pp. 123-134. Feb 2013.

[29] Mohamed Abubaker and Wesam Ashour," Efficient Data Clustering Algorithms: Improvements over Kmeans", [*International Journal of Intelligent Systems and Applications (IJISA),*](http://www.mecs-press.org/ijisa/) vol.5, no.3, pp.37-49, 2013. DOI: 10.5815/ijisa.2013.03.04.

[28] Belal Elfarra, Tayseer El Khateeb and Wesam M. Ashour, "BH-centroids: a new efficient clustering algorithm", *International Journal of Artificial Intelligence and Application for Smart Devices IJAIASD***,** 1(1): pp.15-24, 2013. SERSC, ISSN: 2288-6710.

[27] Raed T. Aldahdooh and Wesam M. Ashour," DIMK-means “Distance-based initialization method for K-means clustering algorithm”", *International Journal of Intelligent Systems and Applications (IJISA),* vol.5, no.2, pp.41-51, 2013. ISSN: 2074-904X. MECS. DOI: 10.5815/ijisa.2013.02.05.

[26] Hassan M Dawoud and Wesam M. Ashour," Modified DBSCAN Clustering Algorithm for Data with Different Densities", Computing and Information Systems, 16(3):16-21, 2012. ISSN 1352-9404.

[25] Ahmed M. Serdah and Wesam M. Ashour, "Overcome the problem of different density-regions using the Inter-Connectivity and the Closeness", *Computing and Information Systems*, 16(3):2-7, 2012. ISSN 1352-9404.

[24] Bilal A.Shehada,Mahmoud Z.Alkurdi and Wesam M. Ashour, "Data Clustering Using Wave Atom", *International Journal of Intelligent Systems and Applications (IJISA),* vol.4, no.9, pp.39-45, 2012. ISSN: 2074-904X. MECS. DOI: 10.5815/ijisa.2012.09.05.

[23] Osama A. Ghanem and Wesam M. Ashour, “Stemming Effectiveness in Clustering of Arabic Documents,” *International Journal of Computer Applications (IJCA)*, 49(5):1-6, July 2012. Published by Foundation of Computer Science, New York, USA.

[22] Mahmoud Alzalaan, Raed Al-dahdooh and Wesam M. Ashour, “EOPTICS Enhancement Ordering Points to Identify the Clustering Structure,” *International Journal of Computer Applications (IJCA)*, 40(17):1-6, February 2012. Published by Foundation of Computer Science, New York, USA.

[21] Ahmed J. Afifi and Wesam M. Ashour, “IMAGE RETRIEVAL BASED on CONTENT USING COLOR FEATURE,” *ISRN Artificial Intelligence*, vol. 2012, Article ID 248285, 11 pages, 2012. doi:10.5402/2012/248285.

[20] Wesam M. Ashour and Motaz Murtaja, " Finding within Cluster Dense Regions Using Distance Based Technique", *International Journal of Intelligent Systems and Applications (IJISA),* vol.4, no.2, pp.42-48, 2012. ISSN: 2074-904X. MECS. DOI: 10.5815/ijisa.2012.02.05.

[19] Mohammed A. H. Lubbad, Wesam M. Ashour, "Cosine-Based Clustering Algorithm Approach", *International Journal of Intelligent Systems and Applications (IJISA),* vol.4, no.1, pp.53-63, 2012. ISSN: 2074-904X. MECS. DOI: 10.5815/ijisa.2012.01.07.

[18] Mohammed El Agha, Wesam M. Ashour,"Efficient and Fast Initialization Algorithm for K-means Clustering*", International Journal of Intelligent Systems and Applications (IJISA),* vol.4, no.1, pp.21-31, 2012. ISSN: 2074-904X. MECS. DOI: 10.5815/ijisa.2012.01.03.

[17] Mohammad T. Elbatta, Raed M. Bolbol, and Wesam M. Ashour, “A Vibration Method for Discovering Density Varied Clusters,” *ISRN Artificial Intelligence*, vol. 2012, Article ID 723516, 8 pages, 2012. doi:10.5402/2012/723516.

[16] Rami Jnena, Mohammed Timraz and Wesam Ashour, “Avoiding Noise and Outliers in K-means,” Computing and Information Systems, 15(2):69-78, 2011. ISSN 1352-9404.

[15] Rwand Ahmed, Eman El-Zaza and Wesam Ashour, “Multi-Density DBSCAN Using Representatives:MDBSCAN-UR,” Computing and Information Systems, 15(2):22-28, 2011. ISSN 1352-9404.

[14] Amer M. Elkourd and Wesam Ashour, ”A modified DBSCAN Clustering Algorithm,” Computing and Information Systems, 15(2):09-13, 2011. ISSN 1352-9404.

[13] Mohammad F. Eltibi and Wesam Ashour, “Initializing K-Means Clustering Algorithm using Statistical Information,” *International Journal of Computer Applications (IJCA)*, 29(7):51-55, 2011. ISBN: 978-93-80864-78-6. Published by Foundation of Computer Science, New York, USA.

[12] Hadi A Alnabriss and Wesam Ashour, “Avoiding Objects with few Neighbors in the K-Means Process and Adding ROCK Links to Its Distance,” *International Journal of Computer Applications (IJCA)*, 28(10):12-17, 2011. ISBN: 978-93-80864-70-4. Published by Foundation of Computer Science, New York, USA.

[11] Alaa H. Ahmed and Wesam Ashour’ “An Initialization Method for the K-means Algorithm using RNN and Coupling Degree,” *International Journal of Computer Applications (IJCA)*, 25(1):1-6, 2011. ISBN:978-93-80752-95-0. Published by Foundation of Computer Science, New York, USA.

[10] Khaled  Alnaji and Wesam Ashour, “A Novel Clustering Algorithm Using K-means (CUK),” *International Journal of Computer Applications (IJCA)*, 25(1):25-30, 2011.ISBN:978-93-80752-95-0. Published by Foundation of Computer Science, New York, USA.

[9] Radwan and W. Barbakh, “Virtual Space Initialization Method for K-means Algorithm,” Computing and Information Systems, 13(2):27-42, May 2009. ISSN 1352-9404.

[8] C. Fyfe, W. Barbakh, W. C. Ooi and H. Ko, “Topological Mappings of Video and Audio Data,” International Journal of Neural Systems (IJNS), 18(6): 1-9, December 2008.

[7] W. Barbakh and C. Fyfe. ”A Novel Construction of Connectivity Graphs for Clustering and Visualization,” *World Scientific and Engineering Academy and Social (WSEAS) TRANSACTIONS on COMPUTERS*, 7(5): 424-434, May 2008, ISSN: 1109-2750.

[6] W. Barbakh and C. Fyfe, “Online clustering algorithms,” *International Journal of Neural Systems (IJNS)*, 18(3): 1-10, 2008.

[5] W. Barbakh and C. Fyfe, “Local vs global interactions in clustering algorithms: advances over K-means,” *International Journal of Knowledge-based and Intelligent Engineering Systems (KES)*, 12(2): 83-99, 2008. ISSN 1327-2314.

[4] W. Barbakh, “Similarity graphs,” Computing and Information Systems, 11(3):1-11, November 2007. ISSN 1352-9404.

[3] W. Barbakh and C. Fyfe, “Inverse weighted clustering algorithm,” Computing and Information Systems, 11(2)10-18, May 2007. ISSN 1352-9404.

[2] W. Barbakh, “The family of inverse exponential k-means algorithms,” Computing and Information Systems, 11(1):1-10, February 2007. ISSN 1352-9404.

[1] W. Barbakh and C. Fyfe, “Performance functions and clustering algorithms,” Computing and Information Systems, 10(2):2-8, May 2006. ISSN 1352-9404.

***Conferences***

[10] Wesam Ashour and Colin Fyfe. “Improving Clustering using Bregman Divergences”, In the 11th UK workshop on Computational Intelligence *UKCI 2011*, pages:144-149, University of Manchester, September 2011.

[9] Wesam Ashour and Saad Sunoallah. “Multi Density DBSCAN”, In International Conference on Intelligent Data Engineering and Automated Learning *IDEAL 2011*, pages 446-453, University of  East Anglia, UK, September 2011. LNCS 6936. Springer.

[8] Motaz K. Saad and Wesam Ashour, “Arabic Morphological Tools for Text Mining”, 6th ArchEng International Symposiums, EEECS’10 the 6th International Symposium on Electrical and Electronics Engineering and Computer Science, European University of Lefke, Cyprus, 2010.

[7] Motaz K. Saad and Wesam Ashour, “OSAC: Open Source Arabic Corpora”, 6th ArchEng International Symposiums, EEECS’10 the 6th International Symposium on Electrical and Electronics Engineering and Computer Science, European University of Lefke, Cyprus, 2010.

[6] Motaz K. Saad and Wesam Ashour, “Arabic Text Classification Using Decision Trees”, Proceedings of the 12th international workshop on computer science and information technologies CSIT’2010, Vol.2, Research Session 3 “Intelligent Systems”, pp. 75-79, Moscow – Saint-Petersburg, Russia, 2010.

[5] W. Barbakh and C. Fyfe, “Clustering and visualization with alternative similarity functions”, In *The 7th WSEAS international conference* on artificial intelligence, knowledge, engineering and data bases, *AIKED’08*, pages 238-244, University of Cambridge, UK, February 2008. ISSN: 1790-5109 ISBN: 978-960-6766-41-1.

[4] W. Barbakh and C. Fyfe, “Clustering with reinforcement learning”, In International Conference on Intelligent Data Engineering and Automated Learning *IDEAL07*, pages 507-516, University of Birmingham, UK, December 2007. LNCS 4881. ISSN 0302-9743 ISBN 978-3-540-77225-5.

[3] W. Barbakh, “Clustering and topology preserving mappings algorithms” (Poster), In 3rd Annual Research Conference, University of the West of Scotland, UK, 9-10th May 2007.

[2] W. Barbakh, M. Crowe, and C. Fyfe, “A family of novel clustering algorithms”, In 7th International Conference on Intelligent Data Engineering and Automated Learning -7th *IDEAL 2006*, pages 283-290, University of Burgos, Spain, September 2006. ISSN 0302-9743 ISBN-13  978-3-540-45485-4.

[1] W. Barbakh, “New weighted k-means algorithm for clustering” (Poster), In Paisley University Research Conference, UK, 10th May 2006.

***Book Chapters***

[2] Book title: [Similarity-Based Clustering: Recent Developments and Biomedical Applications](http://www.springer.com/computer/bioinformatics/book/978-3-642-01804-6)
Editors: M.Biehl, B.Hammer, M.Verleysen, T.Villmann. LNAI 5400, 2009
Chapter Title: [Immediate Reward Reinforcement Learning for clustering and Topology Preserving Mappings](http://portal.acm.org/citation.cfm?id=1560390).  pp.35-51
Authors: Colin Fyfe, Wesam Barbakh. Springer – verlag Berlin Heidelberg

[1] M. Pena, W. Barbakh and C. Fyfe. [*Principal Manifolds for Data Visualization and Dimension Reduction*](http://www.springerlink.com/content/lv8731/?p=5e95730113e94258bd3e082f0c04047b&pi=0), volume ISBN 978-3540-73749-0, chapter [Topology-Preserving Mappings for Data Visualisation](http://www.springerlink.com/content/m3h77k2lp22g3910/), pages 132–152. Springer, 2007.

***Books***

[1] Barbakh, Wesam Ashour; Wu, Ying and Fyfe, Colin

[**Non-Standard Parameter Adaptation for Exploratory Data Analysis**](http://www.springer.com/engineering/book/978-3-642-04004-7)

Springer, September  2009, ISBN: 978-3-642-04004-7.

**Technical Reports**

[2] W. Barbakh. Local versus global interactions in clustering algorithms. Technical Report 43, School of Computing, University of the West of Scotland, March 2007. ISSN 1461-6122.

[1] W. Barbakh and C. Fyfe. Tailoring local and global interactions in clustering algorithms. Technical Report 40, School of Computing, University of Paisley, March 2007. ISSN 1461-6122.