



Name: Ayman Mahmoud Aref Abdalla

Employment ID:	565			
E-mail:	ayman@zuj.edu.jo			
Phone	+962-6-4291511, Ext. 391			
Fax:	+962-6-4291432			
Faculty:	Faculty of Science and Information Technology			
Department:	Department of Computer Science / Multimedia Systems			
Academic rank:	Associate Professor			
Issue Date:	3 / 2016			
Specialty:	Computer Science			
Research Interests:	Image and Video Encoding			
Master's / PhD	Degree	University	Country	Year
	PhD	University of Central Florida	USA	2001
Experience:	<p>3/2016 – present: Associate Professor Department of Computer Science / Multimedia Systems Faculty of Science and Information Technology <i>Al-Zaytoonah University of Jordan (ZUJ), Amman, Jordan</i></p> <p>7/2001 – 3/2016: Assistant Professor Department of Computer Science / Multimedia Systems Faculty of Science and Information Technology <i>Al-Zaytoonah University of Jordan (ZUJ), Amman, Jordan</i></p> <p>1/1997 – 5/2001: Graduate Teaching Assistant <i>School of Computer Science, University of Central Florida, Orlando, FL, USA</i></p> <p>6/1999 – 12/1999: Development Co-Op <i>ImageSoft Technologies (Fiserv), Maitland, FL, USA</i></p> <p>9/1992 – 5/1996: Graduate Assistant / Master Tutor <i>Tutorial Center, Montclair State University, Montclair, NJ, USA</i></p>			
Published Research and Books:	<p>FUNDED RESEARCH PROJECTS:</p> <ul style="list-style-type: none"> A. Abdalla, M. Salah and S. Khalaf, "Load-Balancing of Virtual Tours in Distributed Systems." 5/2012–7/2014 (JOD 60,954 – funded by Al-Zaytoonah University of Jordan, Amman, Jordan). 			

- A. Abdalla and A. Abusukhon, “Parallel Information Retrieval.”
7/2007–7/2008 (JOD 11,000 – funded by Al-Zaytoonah University of Jordan, Amman, Jordan).

PUBLICATIONS:

Journal Articles:

1. A. Mazhar and A. Abdalla, “Trade-off of frame-rate and resolution in online game streaming,” *Journal of Computer Science*, vol. 13(10): pp. 505-513, 2017.
<http://thescipub.com/abstract/10.3844/ofsp.11466>
2. A. Almghawish, A. Abdalla and A. Marzouq, “An automatic parallelizing model for sequential code using Python,” *International Journal of Advanced Research in Computer Science and Software Engineering*, vol. 7(3): pp. 276-282, 2017.
http://www.ijarcsse.com/docs/papers/Volume_7/3_March2017/V7I3-01324.pdf
3. A. Abdalla, M. Abdallah and M. Salah, “A brief program robustness survey,” *International Journal of Software Engineering & Applications*, vol. 8(1): pp. 1-10, 2017.
<http://airconline.com/ijsea/V8N1/8117ijsea01.pdf>
4. A. Mazhar and A. Abdalla, “Joint reference frame inter-mode selection for fast H.264 video coding,” *Signal, Image and Video Processing*, vol. 10(4): pp. 617-623, 2016.
<http://link.springer.com/article/10.1007/s11760-015-0785-1>
5. Manar A. Mizher, S.H. Al-Sharaeh, M.C. Ang, A. Abdalla and Manal A. Mizher, “Centroid dynamic sink location for clustered wireless mobile sensor networks,” *Journal of Theoretical and Applied Information Technology*, vol. 73(3): pp. 481-491, 2015.
<http://www.jatit.org/volumes/Vol73No3/18Vol73No3.pdf>
6. A. Abdalla, A. Mazhar, M. Salah and S. Khalaf, “Comparative study of compression techniques for synthetic videos,” *International Journal of Multimedia & Its Applications*, vol. 6(2): pp. 1-10, 2014.
<http://airccse.org/journal/jma/6214ijma01.pdf>
7. A. Tamimi, A. Abdalla and O. Al-Allaf, “Hiding an image inside another image using variable-rate steganography,” *International Journal of Advanced Computer Science and Applications*, vol. 4(10): pp. 18-21, 2013.
http://thesai.org/Downloads/Volume4No10/Paper_4-Hiding an Image inside another Image.pdf
8. A. Abdalla, “Variable-rate steganography using RGB stego-images,” *European Scientific Journal*, vol. 9(15): pp. 62-67, 2013.
<http://eujournal.org/index.php/esj/article/view/1090/1124>
9. A. Abdalla and A. Tamimi, “Algorithm for image mixing and encryption,” *International Journal of*

Multimedia & Its Applications, vol. 5(2): pp. 15-21, 2013.

<http://airccse.org/journal/jma/5213ijma02.pdf>

10. A. Abusukhon, M. Oakes and A. Abdalla, "Performance analysis of distributed IR systems: document-based, term-based and hybrid partitioning," *International Journal of Information Studies*, vol. 1(1): pp. 40-49, 2009.

<http://www.istudies.net/ojs/index.php/journal/article/view/27/27>

11. A. Yahya and A. Abdalla, "A shuffle image-encryption algorithm," *Journal of Computer Science*, vol. 4(12): pp. 999-1002, 2008.

<http://dx.doi.org/10.3844/jcssp.2008.999.1002>

12. M. Nabulsi and A. Abdalla, "The relationship between exclusive-or and the unique existential quantifier," *Journal of Computer Science*, vol. 4(9): pp. 741-743, 2008.

<http://dx.doi.org/10.3844/jcssp.2008.741.743>

13. M. Nabulsi and A. Abdalla, "A method of deductive logical inference proofs," *Journal of Computer Science*, vol. 4(4): pp. 345-348, 2008.

<http://dx.doi.org/10.3844/jcssp.2008.345.348>

14. A. Yahya and A. Abdalla, "Implementation of matrix folding in multimedia transmission," *Information Technology Journal*, (Formerly: *Pakistan J. Information & Technology*), vol. 2(2): pp. 154-158, 2003.

<http://www.scialert.net/qredirect.php?doi=itj.2003.154.158&linkid=pdf>

15. A. Yahya, A. Abdalla and K. Al-Qawasmi, "Compressing video using matrix folding," *Information Technology Journal*, (Formerly: *Pakistan J. Information & Technology*), vol. 2(1): pp. 61-64, 2003.

<http://www.scialert.net/qredirect.php?doi=itj.2003.61.64&linkid=pdf>

16. A. Abdalla and N. Deo, "Random-tree diameter and the diameter-constrained MST," *International Journal of Computer Mathematics*, vol. 79(6): pp. 651-663, 2002.

<http://dx.doi.org/10.1080/00207160211289>

17. A. Abdalla, N. Deo and P. Gupta, "Random-tree diameter and the diameter-constrained MST," *Congressus Numerantium*, vol. 144, pp. 161-182, 2000.

<http://130.203.133.150/showciting;jsessionid=0EAF22A157D0E4B55547660E88789851?cid=1396947>

18. A. Abdalla, N. Deo and R. Fanceschini, "Parallel heuristics for the diameter-constrained MST problem," *Congressus Numerantium*, vol. 136: pp.97-118, 1999.

<http://130.203.133.150/showciting;jsessionid=1BEC324966E4165E0DA536B384980518?cid=2096045>

19. A. Abdalla, N. Deo, N. Kumar and T. Terry, "Parallel computation of diameter-constrained MST and related

problems,” *Congressus Numerantium*, vol. 126: pp. 131-155, 1997.

<http://130.203.133.150/showciting;jsessionid=09877E85B934182CEA699655F644BC78?cid=13322550>

Conference Proceedings / Proceeding in Edited Books:

1. A. Tamimi and A. Abdalla, “A variable circular-shift image-encryption algorithm,” In *The 21st International Conference on Image Processing, Computer Vision, and Pattern Recognition (IPCV '17)*, Las Vegas, NV, USA. 17-20 July 2017.
<http://americancse.org/events/csce2017/conferences/ipcv17>
2. D. Ibrahim, A. Tamimi and A. Abdalla, “Performance Analysis of Biometric Recognition Modalities,” *International Conference on Information Technology (ICIT'2017)*, Amman, Jordan. 17-18 May 2017, pp. 980-984.
<http://ieeexplore.ieee.org/document/8079977>
3. A. Tamimi and A. Abdalla, “An image encryption algorithm with XOR and S-box,” In *The 19th International Conference on Image Processing, Computer Vision, and Pattern Recognition (IPCV '15)*, Las Vegas, NV, USA. 27-30 July 2015.
<http://www.world-academy-of-science.org/worldcomp15/ws/conferences/ipcv15>
4. A. Tamimi and A. Abdalla, “An audio shuffle-encryption algorithm,” In *The International Conference on Internet and Multimedia Technologies (ICIMT '14)*, (Printed in *Proceedings of the World Congress on Engineering and Computer Science 2014*), Vol I: pp. 409-412, San Francisco, CA, USA. 22-24 October 2014.
http://www.iaeng.org/publication/WCECS2014/WCECS2014_pp_409-412.pdf
5. A. Tamimi and A. Abdalla, “A double-shuffle image-encryption algorithm,” In *The 2012 International Conference on Image Processing, Computer Vision, and Pattern Recognition (IPCV '12)*, Las Vegas, NV, USA. 16-19 July 2012. Printed in *Image Processing, Computer Vision, and Pattern Recognition* [eds. H.R. Arabnia and L. Deligiannidis], pp. 496-499, CSREA Press, 2012.
<http://www.world-academy-of-science.org/worldcomp12/ws/conferences/ipcv12>
6. A. Yahya and A. Abdalla, “An AES-based encryption algorithm with shuffling,” In *The 2009 International Conference on Security and Management (SAM '09)*, Las Vegas, NV, USA. 13-16 July 2009. Printed in *Security and Management* [eds. H.R. Arabnia and K. Daimi], pp. 113-116, CSREA Press, 2009.
<http://www.bibsonomy.org/bibtex/2188e14cd290b3483a24c4075d1b41c0e/dblp>
7. A. Abusukhon, M.P. Oakes, M. Talib and A. Abdalla. “Comparison between document-based, term-based and hybrid partitioning,” In *First International*

Conference on the Applications of Digital Information and Web Technologies (ICADIWT '08), Czech Republic, 4-6 August 2008. Printed in *Applications of Digital Information and Web Technologies* [eds. V. Snasel, J. Pokorny, P. Pichappan, E. El-Qawasmeh and E. Ariwa], pp. 90-95, IEEE, 2008.

<http://dx.doi.org/10.1109/ICADIWT.2008.4664324>

8. N. Deo and A. Abdalla, "Computing a diameter-constrained minimum spanning tree in parallel," In *The 4th Italian Conference, CIAC 2000*, Rome, Italy, 1-3 March 2000. Printed in *Algorithms and Complexity, Lecture Notes in Computer Science* [eds. Bongiovanni, Gambosi, and Petreschi], no. 1767, pp. 17-31, Springer-Verlag, New York, 2000.

<http://www.springer.com/us/book/9783540671596>