

Arwa Zabian

- **Position :**

Associated Professor at Jadara University. Irbid- Jordan

Vice Dean of Faculty of Science and Information Technology

- **Personal Information**

Was born at Damascus/Syria on 23 november1966

E-mail: arwa@jadara.edu.jo, azabian@hotmail.com

Cell phone: 00962-798802322

- **Teaching**

- ☐ Web sites designing and developing
- ☐ Multimedia
- ☐ Management Information System
- ☐ IT Infrastructure
- ☐ Computer skills 1
- ☐ Computer Network and applications
- ☐ Internet Skills
- ☐ Responsibility and Professional Ethics
- ☐ Introduction to Information Systems
- ☐ Algorithms
- ☐ Computation Theory
- ☐ Distributed systems
- ☐ Programming with C++
- ☐ Operating systems
- ☐ Data communication
- ☐ Computer security / encryption/ network security
- ☐ Digital image processing
- ☐ Discrete mathematics
- ☐ Modelling and simulation
- ☐ Logic design
- ☐ System analysis and design
- ☐ Computer architecture
- ☐ Fundamentals of Database
- ☐ Special topics in computer science

- **Academic Information**

- 1983 graduated with a Scientific High School License from The Martyr of Basel Al Assad High School- Damascus/Syria.
- 1983-1988 University courses of Physics and Mathematics at Damascus University/Syria.
- 1988 BS Degree on Solid Physics from Damascus University.
- 2000-2004 Ph.D courses of Computer Science at Department of Computer Science of Pisa University /Italy.
- 2004 Ph.D Degree in Computer Science from Department of Computer Science, Pisa University/Italy. Title of Ph.d Thesis Interval Web Caching available at http://phd.di.unipi.it/Theses/PhDthesis_Zabian.pdf
- 2005 got the Assistant Professor Degree at the Department of CIS, Faculty of Science and Information Technology. Irbid National University. Irbid/Jordan
- 2006-2008 Chairwoman of the Department of CIS /Faculty of Science and Information Technology at Irbid National University. Irbid /Jordan
- 2008 – 2015 Assistant professor at Jadara University. Irbid-Jordan
- 2009-2012 Dean of Faculty of Science and Information Technology at Jadara University. Jordan- Irbid
- 2012-16/4/2015 Assistant professor at computer science department/ Jadara University
- 4/2015 till now Associated professor at department of computer science at Jadara University
- 2017 –till now Chairwomen of the department of software engineering / Jadara University

- **Publications A.**
Journals

- (2007)
 1. Hamed Al-Rjoub, Sami Qawasmeh, Arwa Zabian. “**Parallel Sorting and Merging Algorithm**”. Journal of Institute of Mathematics and Computer Science Kolkata-700007 India. Volume 18Number 2 December 2007. PP: 69-75.
 2. Arwa Zabian. “**Topology Discovering and Power Saving Mechanism for Routing in a Tree of Ad-Hoc Wireless Networks**”.Journal of Computer Science 3(8):646-657, 2007. ISSN 1549-3636. 2007 Science Publications.
- (2008)
 1. Sami Qawasmeh, Arwa Zabian, Hamed Al-Rjoub. “**Electronic**

- Monitoring: The Jordanian Employees Point of View***". Journal of Social Science. 4(3): pp: 189-195.2008. ISSN3652-154 Science Publications .
2. Arwa Zabian, Ahmed Ibrahim, Fadi Al-Kalani. "***Dynamic Head Cluster Election Algorithm for Clustered Ad-Hoc Networks***". Journal of Computer Science 4(1):42-50, 2008. ISSN3636-1549Science Publications .
 3. Arwa Zabian, Ahmed Ibrahim. "***Power Saving Mechanism in Clustered Ad-Hoc Networks***". Journal of Computer Science ISSN: 1549-3636. 366 – 371: 4)5(Science Publications 2008.
 4. Hamed Al Rjoub , Arwa Zabian, Ahmad Odat. "***Deterministic Parallel sorting Algorithm for 2-D Mesh of connected computers***". Journal of Computer Science 4(6): 447-453, ISSN 1549-3636Science Publications 2008.
 5. Arwa Zabian, Fadi Al Kalani. "***Local Beam Search Algorithm for Power Saving in Clustered Ad-Hoc Networks***". Journal of Computer Science 4(10): 784-791, ISSN 1549-36362008.Science Publications.
 6. Mwaffaq A.Abu Al hija, Arwa Zabian, Sami Qawasmeh, Omer H. Abu Alhaija. "***A Heapify Based Parallel Sorting Algorithm***". Journal of Computer Science 4 (11): 897-902, 2008.ISSN 1549-36362008 Science Publications
- (2009-2010)
1. Ahmed Ibrahim, Arwa Zabian, Farehan Nizar Esteteya, Amani Khalid Al padawy. "***Algorithm for Text Hiding in Digital Image for Information Security***". International Journal of Computer Science and Network Security (IJCSNS)- Korea. Vol. 9 No. 6 pp. 262-268. Available at http://paper.ijcsns.org/07_book/200906/20090638.pdf.
 2. Raed Sahawneh, Ahmed Ibrahim, Sami Qawasmeh, Arwa Zabian. "***Authentication Method Using Hand Images for Access Control systems***". International Arab Journal of e-Technology (IAJeT).vol.1, No.4. June 2010. ISSN: 1997-6364.
- (2011)
1. Mohammad Subhi Al Batah, Arwa Zabian, Mutaz Abdel Wahed. "***Suitable Features Selection for the HMLP Network Using Circle Segments Methods***" European Journal of Scientific Research. ISSN: 1450-216x. vol.67, No.1 (2011). 52-65
- (2014)
1. Arwa Zabian, Ahmad Ibrahim, Sami Qawasmeh. "***Virtual Explorer: a***

Path Prediction Algorithm for Intelligent Transport Systems". IISTE / Journal of Computer Engineering and Intelligent Systems ISSN (paper) 2222-171. Vol 5. No.3, 2014. PP: 114-122

2. Arwa Zabian. "**Mobile User Motion Detection and Traffic Road Management**". Accepted for Publication in British Journal of Applied Science & Technology – SCIENCEDOMAIN

- (2015)

1. Sami Qawasmeh, Arwa Zabian. "*Three Tier Caching and Replacement Technique for Peer-to-Peer Mobile Web Caching*". International Journal of Wireless and Mobile Computing). Inderscience journals. Vol 9. N 2, 2015. ISSN: E 1741-1092. Online publication date: Mon, 19-Oct-2015. (SCOPUS Q4). Available online :
<http://www.inderscience.com/offer.php?id=72571>

- (2017)

1. Sami Qawasmeh, Arwa Zabian. "*DPSA: Deterministic Parallel Search Algorithm in Large Database*". Journal of Computer Science. Vol.13 issue 9, 2017. pp: 452-459. DOI: 10.3844/jcssp.2017.452.459. ISSN: E 1552-6607. (SCOPUS Q4) Available on line
<http://thescipub.com/abstract/10.3844/jcssp.2017.452.459>

2. "مبتكرات"

Zabian. 2. شبكات التواصل الاجتماعية والإشباع المحققة". (دراسة مسحية) مجلة جامعة القدس

ISSN: المفتوحة للأبحاث والدراسات . مجلد 2، عدد 42، 2017. الصفحات: 337-323 .
E 2414-1208. (impact factor 2017 is 0.8) Available on-line :

<http://journals.gou.edu/index.php/jrresstudy/article/view/1524/1292>

-(2019)

1. Arwa Zabian, Walid Amsha . "*Scientific Issues Treated in the Websites of Jordanian Universities. Analytical study*". NAUN: International Journal of Education and Information Technologies. Volume 13. 2019 (web of science, clarivate) .

- (2021)
 1. Arwa Zabian, Shaker Mrayyen, et al. “**Multi-layer Encryption Algorithm for Data Integrity in Cloud Computing**”. 2nd International Conference on Mathematical Modeling, Computational Intelligence Techniques and Renewable Energy (MMCITRE-2021). **February 6-8/2021**. Organized by Pandit Deendayal Petroleum University
Gandhinagar, Gujarat, India.
- (2022)
 1. Arwa Zabian. “**Automated Breast Cancer Detection Systems (Analytical Study)**”. Accepted for presentation in 3rd International Conference on Mathematical Modeling, Computational Intelligence Techniques and Renewable Energy (MMCITRE-2022)
 2. Arwa Zabian, Ahmad Zohair Ibrahim. “**Hybrid Mathematical Model for Data Classification and Prediction: case study COVID 19**”. International Journal of Mathematics and Computer Science (ISSN 1814-0432). 17(2022). No 3. Open Access. Scopos (Q2).
 3. Arwa Zabian, Sami Qawasmeh. “**The Impact of New Technologies in the Workplace on privacy. Case study- Electronic Monitoring**”. Submitted to The Fourth International Conference: Smart Learning (ICSL2022)
"The way to the boardrooms of tomorrow". Philadelphia university:25-27/10/2022

B. Conferences:

- (2004)

Arwa Zabian, Maurizio A. Bonuccelli. “**On the Latency of BFS Based Interval Cooperative Web Caching**”. IEEE In Proceedings of the 1st International Conference on Information Communication Technologies: from Theory to Applications. ICTTA'04 19-23/4 April.pp: 637-638.Damascus/Syria.
- (2005)

Arwa Zabian, Maurizio Bonuccelli. “**Topology Discovering Algorithm for Mobile Wireless Networks**”. The 7th IFIP International Conference on Mobile and Wireless Communications Networks MWCN'05.
Marrakech, Morocco.19-21 September 2005. H. 4 C200547.

- (2006)
Arwa Zabian. "**Power Management Mechanism For Routing in Ad-hoc Wireless Networks**". Mobile Computing and Wireless Communications International Conference MCWC'06. Proceedings of the First Volume, Issue , 17-20 Sept 2006. Page(s):44 - 49. Digital Object Identifier 10.1109/MCWC.2006.4375194.

Arwa Zabian. "**Topology Discovering Algorithm for Power Saving In Ad Hoc Wireless Networks**". 3rd Annual IEEE Communications Society on Sensor and Ad Hoc Communications and Networks, 2006.SECON'06. Volume 3, Issue, 28-28 Sept.2006 Page(s):910 – 915. Digital Object Identifier 10.1109/SAHCN.2006.288581

Arwa Zabian, Sami Qawasmeh. "**Web Caching in Mobile Environment**". Proceeding of the first Mobile Computing and Wireless Communications International Conference MCWC'06. Amman-Jordan 17-20 September 2006. ISBN: 978-9957-486-00-6. MCWC.2006.

- (2007)
Arwa Zabian. "**An Addressing Scheme for Routing and Power Saving in MANET**". 1stInternational Conference on Digital Communications and Computer Applications DCCA'07. Jordan University of Science and Technology. 19-22/1/2007 Jordan-Amman.

- (2008)
Arwa Zabian. "**Mobile Cellular Networks and Traffic Road: a new Paradigm**". ICTTA'08: 3rdInternational Conference on Information and Communication Technology: From Theory to Applications.7-11 April 2008Damascus/Syria. ID: 569699.

- **Paper Reviewing**

Arwa Zabian is considered one of the reviewer of the International Journal of Computing and Information Science (IJCIS). ISSN 1708-0479Canada. She has reviewed the following paper from 2004 -2008:

1. A Performance Study on Internet Service Provider Mail Servers. Jun Wang. Accepted in ISCC '04.
2. Three Beacon Sensor Network Location. Mohit Choudhary, Bhaskaran Raman . Accepted in WEMIC'06
3. Design and Evaluation of an Input Buffered Packet Switch. A. Bilami, M. lalam, M. Daoui and M. Benmohamme .To be published in International Journal of Computing and Information Sciences.

4. Storytelling Information Management System (STIMS). To be published in the 2nd International Conference on Social and Organizational Informatics and Cybernetics. 2006
5. Securing Bluetooth Wireless Connections-A Step Forward. Fathi Taibi. To be published in International Journal of Computing and Information Sciences. 2007

- **Seminars**

Power Saving Mechanism in a Tree of Wireless Ad-Hoc Networks 14/8/2006

Jordan University for Science and Technology- Department of EE (JUST). Amman-Jordan.

1/9/2021: A Journey Toward My Privacy in CyberSpace . Himayatech CyberSecurity Incubator. INTAJ- startup. Amman – Jordan

- **Courses**

The courses attended during the Ph.D studies at Pisa University:

1. Distributed Algorithms. Danny Krinzac. Carleton University/USA. June
2. Computational Geometry. Bruno Codenotti. National Council of Researches (CNR) .Pisa/Italy Feb-March 2001.
3. AD-Hoc Networks. Silvia Giordano SUPSI-DTI, CH-6928 Manno, Switzerland. October-November 2002.
5. Web Services Fundamentals. Malu Castellanos, Manolo Gracia . Hewlett-Packard Laboratories. June 2004.

- **Schools**

The schools and the correspondent courses frequented during the Ph.D studies:

1. National School for Ph.D Students: Bertinoro - Bologna/Italy: 22/0502/06/2000
 - High Performance Micro Architectures (HPMA). Antonio Gonzalez. University of Polytechnic of Catalunya Barcelona-Spain.
 - Algorithmic Issues in Advanced Data Structures (AIADS). Roberto Grossi. University of Pisa/Italy
2. Advanced School on Mobile Computing. High Normal School of Pisa. 27/09/2003

- A Journey through Research challenges for Next Generation Wireless Systems. I.F Akilidiz. School of Electrical and Computer Engineering Georgia Institute of Technology Atlanta, GA 30332
- Ad-Hoc Wireless Networks: Protocols and Applications. Mario Gerla. UCLA Computer Science Department. 3732 Boelter Los Angeles, CA 90095-1596.

- **Languages**

Affluent speaking and writing of English, Italian and Arabic languages.

Affluent speaking of the French language.