



**Prof. Sahar Idwan**

**Department of Computer Science  
Faculty of Prince Al Hussein Bin  
Abdallah II of Information Technology  
The Hashemite University, Jordan  
P.O. Box 330127, Zarqa 13133, Jordan  
e-mail: [sahar@hu.edu.jo](mailto:sahar@hu.edu.jo); [sahar700@hotmail.com](mailto:sahar700@hotmail.com)**

### **OBJECTIVES**

- To be a part of a dynamic team where I can able to develop a solution for problems in computer science, moving objects, mobile computing, Bluetooth technology, Wi-Fi and Wi-Fi Direct technology, disaster management and recovery, mobile applications, IoT, and application of computing as a scientific paradigm.
- To participate in a productive environment that encourages creativity and knowledge enrichment.
- To establish a graduate program in the computer science and applications department at the Hashemite University that enriches the research in the Information Technology field.
- To support women in the information technology field.

### **EDUCATION**

PhD (Computer Science) Colorado School of Mines – USA, 2005.

**Thesis Title: Algorithms for Discrete Geometrics and Graph Theoretic Pursuit Problems. Advisor: Prof. Dinesh Mehta**

M.Sc. (Computer Science) The University of Jordan – Jordan, 1998

B.Sc. (Computer Science) The University of Jordan – Jordan, 1992

### **RESEARCH INTERESTS**

Algorithms and Applied Algorithms, Moving Objects, Mobile Communications and applications, Load Balancing, IoT and Smart City, how to apply Data Science to IoT data, e-learning and applications of computing as a scientific paradigm, Bluetooth, wireless technology, Wi-Fi and Wi-Fi Direct Technology, and Women Studies in the Information Technology field

### **TECHNICAL PROFICIENCY**

**Languages:** C/C++, Java, Pascal, Basic, SQL, LaTeX, Matlab, UML

**Instructional Design:** Lectora, Elluminate, Tigrity

**Others:** Unix/Linux, Windows, Windows 2000/XP/NT

## PRINCIPAL PUBLICATIONS

### A. Journal Publications

1. Ebaa Fayyoubi, **Sahar Idwan** (2021), Semantic Partitioning and Machine Learning in Sentiment Analysis, *Data*, 6(6), 67, pp.1-19.
2. Sari Awwad, **Sahar Idwan**, Hasan Gharaibeh (2021), Real-time sign languages character recognition, *Int. J. Computer Applications in Technology*, Vol. 65, No. 1, pp. 36-44.
3. Ebaa Fayyoubi, **Sahar Idwan**, Heba AboShindi (2020), Machine Learning and Statistical Modelling for predication of Novel COVID-19 patients, *International Journal of Advanced Computer Science and Applications*, 11(5), pp. 122-126.
4. **Sahar Idwan**, Shereen Ismail, Moh'd Sami Ashhab, Mohammed Awad, Izzeddin Matar , “Artificial Neural Network Tactic to Predict Interest in Majors in Computing” *International Journal of Computer Aided Engineering and Technology* (Accepted for publication (3/3/2020)).
5. **Sahar Idwan**, Imran Mahmood, Junaid Ahmed Zubairi, Izzeddin Matar (2020) Optimal Management of Solid Waste in Smart Cities using Internet of Things, *Wireless Personnel Communications*, 110 (1), pp. 485-501.
6. M. Awad, Z. Al-Qudah, **S. Idwan**, A. Jallad (2019) Evaluating Password Behavior at a Small University, *Journal of Computer Science*, Science Publications, Vol. 15, Number 9, 2019, pp. 1-9, ISSN: 1549-3636.
7. Hamed Assaf, **Sahar Idwan** and Maissa Farahat (2018) Assessing Recycling attitudes and behavior in Ras Al Khaimah - UAE, *Journal of Environmental Engineering and Science*, *Journal of Environmental Engineering and Science*, Vol. 14 Issue 14, pp. 218-224.
8. Junaid Zubairi and **Sahar Idwan** (2018) Smart algorithms for patient assignment in disasters *ICT Express (Information & Communication technology Express)*, Vol. 4, Issue 2, pp. 107-111.
9. **Sahar Idwan** and Junaid Ahmed Zubairi (2016), load Balancing for Disaster Recovery and Management, *Wireless Personal Communications*, 90(1), 369-379.
10. Ebaa Fayyoubi, **Sahar Idwan**, Khalid AL-Sarayreh, Randa Obeidallah (2015) E-Learning: Challenges and Ambitions at Hashemite University, *International Journal of Innovation and Learning*, *International Journal Innovation and Learning*, Vol. 17, No. 4, pp.470-485.
11. Ebaa Fayyoubi, **Sahar Idwan**, Hiba A. Muhared, Izzeddin Matar, Obaidah A. Rawashdeh (2014) L2CAP-based prototype media streaming via Bluetooth technology, *International Journal of Networking and Virtual Organizations*, Vol 14 No. 3, pp. 221-238.
12. Ebaa Fayyoubi, **Sahar Idwan**, Alaa Agha Karss (2014) Developing fever watcher-kit via Bluetooth wireless technology. *International Journal of Business Information Systems*, Vol. 16 No. 4, pp. 431-445.
13. Khalid T. Al-Sarayreh, Kenza Meridji, Ebaa Fayyoubi, **Sahar Idwan** (2014) A Novel Approach to Build a Generic Model of Photovoltaic Solar System Using Sound Biometric Techniques, *International Journal of Information Technology and Web Engineering (IJITWE)* 9(1):31-44.
14. **Sahar Idwan**, Ebaa Fayyoubi, Feras Hanandeh, Hiba Muhareb, Bilal Daghmash (2013) BlueThunder overcomes the current drawbacks of the Bluetooth wireless technology, *IJBIS*, Vol. 12 No. 2, pp. 194-209.

15. Ahmad Al-Khasawneh, Mohammad Khasawneh, Mohammad Bsoul, **Sahar Idwan**, Aykut Hamit Turan (2013) "Models for Using Internet Technology to Support flexible E-learning", International Journal of Management in Education, Volume 7, Numbers 1-2, pp. 61-70.
16. Rami H. Fouad, "Moh'd Sami" Ashhhab, Adnan Mukattash, **Sahar Idwan** (2012) Simulation and Energy Management of an Experimental Solar system through Adaptive Neural Networks: A case study in Jordan, IET Science, Measurement and Technology, IET Science, Measurement & Technology, Vol. 6, issue 6, 2012, pp. 427 - 431
17. **Sahar Idwan**, Adnan Mukattash, "Moh'd Sami" Ashhhab, Ayat Nizar, Wael Etaiwi (2011) Application of Enhanced Depth First Search Algorithm to Jordan Road Networks Structure, European Journal of Scientific Research, Vol.5 No.3, pp.327-332
18. **Sahar Idwan**, Wael Etaiwi (2011) Dijkstra Algorithm Heuristic Approach for Large Graph", Journal of Applied Sciences, Vol. 11 No. 12, pp. 2255-2259.
19. Murad S. Samhour, **Sahar Idwan**, Adnan Mukattash (2011) A system for Adaptive Intelligent learning, International Review on Modelling and Simulation (IREMOS), Vol. 4 Issue. 5, pp. 2651-2656
20. Adnan Mukattash, **Sahar Idwan**, Moh'd Sami Ashhhab, Murad Samhour and Izzeddin A. Matar (2011) Optimal Computerized Model for Designing Cellular Manufacturing Systems using Neural Network, Journal of Applied Sciences, Vol. 11 No. 15, 2837-2842
21. **Sahar Idwan** (2009) Developing a Mobile Application via Bluetooth Wireless Technology for enhancing Student-Instructor Communication, International Journal of Interactive Mobile Technologies, ISSN 1865-7923, Vol. 3, Issue 3, July 2009, pp. 34-37
22. **Sahar Idwan**, Wael Etaiwi (2009) Computing Breadth First Search in Large Graph Using hMetis Partitioning, European Journal of Scientific Research, Vol. 29 No.2, pp.215-221
23. **Sahar Idwan**, Suad Alramouni, Mosleh Al-Adhaileh, Ahmad Al-Khasawneh (2008) Enhancing mobile advertising via Bluetooth technology, International Journal of Mobile Communications, Vol. 6 No.5 pp. 587 – 597
24. **Sahar Idwan**, Dinesh P. Mehta, Mario A. Lopez (2004) Fast Pursuit of Mobile Nodes using TPR Trees, International Journal on the Foundations of Computer Science, Vol. 15 No 5, pp. 753-772

## **B. Conference Publications**

1. Fadi Bala'awi, Shatha Mubaideen, James Smithies, Pascal Flohr, Alessandra Esposito, Carol Palmer, **Sahar Idwan** (2021) "The MaDiH (مديج): Mapping Digital Cultural Heritage in Jordan, Opportunities and Limitations" In: Rauterberg M. (eds) Culture and Computing. Interactive Cultural Heritage and Arts. HCII 2021. Lecture Notes in Computer Science, vol 12794. Springer, Cham.
2. **Sahar Idwan**, Abdul Halim Jallad, Zakaria Al-Qudah, Mohammed Awad, Said Elnaffar, Shereen Ismail, Izzeddin Matar (2017) "Factors deterring students from majoring in ICT related fields in the UAE" in 2017 *International Conference on Electrical and Computing Technologies and Applications (ICECTA)*, pp. 1-4
3. I. Mahmood, J. Zubairi, **Sahar Idwan** and I. Mattar, "Experiments in Routing Vehicles for Municipal Services" in HPCS'18 Proc. IEEE, Pages 993-999

4. M. Awad, Z. Al-Qudah, **Sahar Idwan**, A. Jallad (2016) Password security: Password behavior analysis at a small university, in *5th International Conference on Electronic Devices, Systems and Applications (ICEDSA), December 6-8, 2016*
5. **Sahar Idwan**, Junaid Ahmed Zubairi and Imran Mahmood (2016) Smart Solutions for Smart Cities: Using Wireless Sensor Network for Smart Dumpster Management, in *Proceedings of the 17th of the International Conference on Collaboration Technologies and Systems (CTS 2016), Florida –USA*
6. **Sahar Idwan**, Ebaa Fayyumi, Hiba A. Muhareb, Izzeddin Matar, Obaidah A. Rawashdeh (2014) Achieving Extended Displays Prototype via Wi-Fi Direct Technology, in *Proceedings IEEE 11th HONET-PfE2014, North Carolina, USA*
7. Kenza Meridji, Khalid T. Al-Sarayreh, Ebaa Fayyumi, and **Sahar Idwan** (2013) Integrated Model of Photovoltaic Solar System with the Sound Biometric Techniques, in *Proceedings IEEE 2013 1st International Conference & Exhibition on the Applications of Information Technology in the Development of Renewable Energy processes & System IT-DREPS 2013, Amman, Jordan May 29-31*
8. **Sahar Idwan**, Salamh Aldajeha, Izzeddin Matar, Rana Mutlaq (2011) BUILDING Hand Activities Application for Cerebral Palsy Children, in *Proceedings of 5th Global Conference on Power Control and Optimization, Dubai, UAE, 1-3 June 2011*
9. **Sahar Idwan** and Dinesh P. Mehta (2006) Accelerated Pursuit Using Hierarchical Graphs, in *Proceedings of 2nd Jordan International Conference on Computer Science and Engineering, December 5-7 2006, Al-Salt, Jordan, pp. 104-110*
10. **Sahar Idwan** and Dinesh P. Mehta (2006) Fast Probabilistic Pursuit of Mobile Entities in Road Networks, in *Proceedings of Grace Hopper Celebration of Women in Computing, October 4-7 2006, San Diego, USA, pp. 437-444*
11. **Sahar Idwan** and Dinesh P. Mehta (2005) Fast Pursuit of Mobile Nodes in Road Networks, in *Proceedings of the 2005 International Arab Conference on Information Technology, ACIT2005, Dec 6-8, 2005, Amman, Jordan, pp. 519-526*

<b>ACADEMIC EXPERIENCE</b>	
----------------------------	--

<b>April 2021 - Present</b>	Full Professor, Prince Al Hussein Bin Abdallah II Faculty of Information Technology – The Hashemite University, Zarqa, Jordan
Sept 2018 – April 2021	Associate Professor, Prince Al Hussein Bin Abdallah II Faculty of Information Technology – The Hashemite University, Zarqa, Jordan
2014 – 2018	Associate Professor, Computer Science and Engineering Department, School of Engineering, American University of Ras Al Khaimah, Ras Al Khaimah, UAE
2012 – 2014	Associate Professor, Prince Al Hussein Bin Abdallah II Faculty of Information Technology – The Hashemite University, Zarqa, Jordan
2005 – 2012	Assistant Professor, Prince Al Hussein Bin Abdullah II Faculty of Information Technology – The Hashemite University, Zarqa, Jordan
2003 – 2005	Research Assistant, Department of Mathematical and Computer Science, Colorado School of Mines, Golden, USA

1998 – 2001      Lecturer, Faculty of Information Technology/Philadelphia University, Jordan

1993 – 1996      Lab Supervisor, Amman Private University, Jordan

#### **TEACHING EXPERIENCE**

**1. Hashemite University (2018-Present)**

Computer Fundamentals., Object-Oriented programming 1, Algorithms, Operating Systems, Object Oriented Software Development, Graduation Project

**2. American University of Ras Al Khaimah (2014 – 2018)**

Software Engineering, Algorithms, Operating Systems, Introduction to computer Programming C++, Programming Languages

**3. Hashemite University (2005 – 2014)**

Computer Fundamentals., Object-Oriented programming 1, Algorithms, Operating Systems, Object Oriented Software Development, Graduation Project

**Co-supervising** Master student: Suzane A. Assaf, Title: “Mixed mode string matching using look up table for DNA sequence matching”, Al Al-Bayt University, Dec. 2010-Dec. 2011

**External Examiner for the** Master student: Abeer Zuhair Al-Zghoul, Title: “Evaluating Harmony Search Algorithm Hybridized with Differential Evolution Strategies”, Yarmouk University, May 2014

**4. Philadelphia University (1998 – 2001)**

Introduction to Computer Science, Computer Skills2, Data structure, Database, Computer Graphics, Visual Programming, Programming Languages such as: C++, Prolog, Java

#### **WORK EXPERIENCE**

**Sept. 2018 – 2020      Dean of Prince Al Hussein Bin Abdallah II for Information Technology – The Hashemite University, Zarqa, Jordan**

August 2014 – Present      Associate Dean, School of Engineering- American University of Ras Al Khaimah, Ras Al Khaimah -United Arab Emirates

Sept 2011 – Aug 2012      Director of the E-learning Center – Hashemite University, Zarqa, Jordan.

Sept 2006 – Sept 2009      Vice Dean, Prince Al Hussein Bin Abdullah II Faculty of Information Technology – Hashemite University, Zarqa, Jordan.

Sept 2006 – Sept 2007      Department Head, Department of Computer Information System – Hashemite University, Zarqa, Jordan

## **Funding Research**

1. Grant from Newton-Khalidi Fund to support project entitled “Mapping Digital Heritage in Jordan (MaDiH) project (Feb. 2019-Feb 2021) Investigators: Dr Fadi Bala'awi, Dr James Smithies, Dr Carol Palmer, Dr Pascal Flohr, **Assoc. Prof. Sahar Idwan**, Mrs Samia Khouri, Dr Alessandra Esposito, Arch. Shatha Mubaideen, Raya Sharbain
2. Grant to Support the Initiation of International Collaboration: PI (Jordan Side): **Dr. Sahar Idwan**, German Research Foundation (DFG) (June 2017- August 2017), Topic: Routing in Android-based Opportunistic Networks using Wi-Fi and Bluetooth Signaling
3. 43,000AED Co-investigators: Dr. Hamed Assaf, **Dr. Sahar Idwan** and Dr. Abdul Halim Jalad and Eng. Madiha Ammari, Sheikh Saud Bin Saqr Al Qasimi Foundation for Policy Research (September 2016 – June 2017) Topic: Raising Public Awareness of RAK Mangrove Wetland
4. 10,000AED Co-applicants Prof. Junaid Zubairi and **Dr. Sahar Idwan**, School of Graduate Studies & Research, American University of Ras Al Khaimah (December 2014 – December 2015) Topic: Load Balancing for Disaster Recovery and Management
5. 29100 JD Co-applicants Dr. Alaa E. Abdallah, Dr. Emad E. Abdallah , Dr. Ayoub Alsrhan, **Dr. Sahar Idwan**, Deanship of scientific Research - Hashemite University - (January 2013 – January 2014) Topic: Enhanced Ant Colony Routing Algorithms for Mobile Ad-Hoc Network

## **MEMBERSHIP OF COMITTES IN THE COLLEGE AND UNIVERSITY**

- |   |  |
|---|--|
| <b>Hashemite University-<br/>Jordan<br/>(2018-2020)</b>               | <ol style="list-style-type: none"><li>1. Dean of the Faculty of Prince Al-Hussein Bin Abdallah II for Information Technology</li><li>2. Member in ABET Accreditation Committee, 2018- Present</li><li>3. Member in Communications and Information Technology Sector Committee of the Scientific Research Support Fund (2018-2019)</li></ol>  |
| <b>American University of<br/>Ras Al Khaimah –UAE<br/>(2014-2018)</b> | <ol style="list-style-type: none"><li>1. Member in ABET Accreditation Committee, 2014-2018</li><li>2. Member in the Faculty Handbook Committee, 2015 – 2018</li><li>3. Member in the Academic Calendar Committee, 2016 – 2017</li><li>4. Member in the SACSCOC Accreditation Committee, 2014/2015</li><li>5. Member in Ad Hoc Appeal Committee, 2014</li><li>6. Chair of the Department Review Committee, 2014</li></ol> |
| <b>Hashemite University-<br/>Jordan<br/>(2005-2014)</b>               | <ol style="list-style-type: none"><li>1. Member in Higher Education Council, 2013</li><li>2. Representative of the college in the university council for the academic years 2009-2010 and 2005 – 2006</li><li>3. Member in the committee for the establishment the program "Diploma of Education in Educational Technology and E-learning"</li></ol>   |

4. Member in the committee of the general supervision of project related to information technology, communication and e-learning
5. Member in the Supreme Committee for Information Technology
6. Member in the Scientific and Research Committee
7. Member in the Achievement Exam Committee.
8. Member in the Timetable and Class Schedule Committee
9. Member in the Course Syllabus Committee
10. Member in the Scientific Day Committee

<b>PROFESSIONAL DEVELOPMENT ACTIVITIES</b>
--

**Participation/Member in profession-related workshops/conference:**

1. **Participated as moderator** in *Women Entrepreneurship Realization*, hosted by IEEE Women in Engineering , Amman, Jordan June 26,2021 (Zoom Meeting).
2. **Participated** in *HEInnovate workshop within the framework of the project JUICEE (Developing Jordanian Universities' Innovation Capacities and Entrepreneurship Education)*, Amman, Jordan May 31st,2021 (Zoom Meeting).
3. **Participated as a mentor** in the Intensive Orientation Program which is considered to be a part of the " *Empowering Women in Local Administration*" project that is hosted by the Jordanian National Committee's for Women, Feb. 20-28,2021.
4. **Participated as presenter** in the Mapping Digital Cultural Heritage in Jordan (مديح) virtual workshop on "*Identifying datasets on Jordanian Cultural Heritage: A user feedback*", Webinar, Oct. 13-14,2020.
5. **Member** in the *Technical Program Committee of the International Conference on Electronic and Computing Technologies and Applications (ICECTA'2019)*, American University of Ras Al Kamiah, UAE, November 19-21, 2019.
6. **Keynote Speaker** in the MaDiH workshop on "*Asset identification and requirement elicitation*", CBRL, British Institute, Amman, Jordan, October 29<sup>th</sup>, 2019.
7. **Member** in the *Advisory Committee of the international Conference in New Trends in Computing Sciences (ICTCS'19)*, Amman – Jordan, Oct 9-11, 2019
8. **Participated** in the *13<sup>th</sup> IEEE UAE Student Day*, hosted by American University of Ras Al Kamiah, UAE, November 19-21, 2019.
9. **Keynote Speaker** in the *Empowering Girls in The Information Technology* hosted by the Prince Al-Hussein Bin Abdallah II for Information Technology, The Hashemite University, Feb. 12,2019.
10. **Member** in *Communications and Information Technology Sector Committee of the Scientific Research Support Fund (2018-2019)*.
11. **Member** in the *International Steering Committee of the International Conference on Electronic and Computing Technologies and Applications (ICECTA'2017)*, hosted by American university of Ras Al Kamiah, UAE, 21-23/11/2017.

12. **Participated** in the *Sustainable Campus Audit* – May 2017, Abu Dhabi.
13. **Participated** in the Sustainability Action Project (SAP) community outreach efforts with a project entitled “*Raising Awareness about Recycling Solid Waste*” – Abu Dhabi , UAE,May 2017.
14. **Participated** in the 3<sup>rd</sup> meeting of *Emirates Digital Association for Women (EDAW111)*, January 21<sup>st</sup> , 2017.
15. **Keynote Speaker** in the 1<sup>st</sup> workshop *Boosting Opportunities Awareness for Women in STEM Education and Career Pathway*, hosted by American University of Ras Al Kamiah, UAE, January 13<sup>th</sup>, 2017,
16. **Member** in the *technical program committee and local organizing committee of the 5th International Conference on Electronic Devices, Systems and Applications (ICEDSA)*, 6-8 December 2016.
17. **Participated in** the *Sustainable Campus Audit* – May 2016, Abu Dhabi
18. **Participated in** the Sustainability Action Project (SAP) community outreach efforts with a project entitled “*The Domestic Treasure: Sustainability from a different perspective*” – Abu Dhabi, UAE, May 2016.
19. **Participated in** the 2<sup>nd</sup> *Emirates Digital Association for Women (EDAW111)*, March 15, 2016.
20. **Keynote Speaker** in *12th International Conference on High Capacity Optical Networks and Enabling/Emerging Technologies*, HONET-ICT’15, Dec 21-23, Islamabad, Pakistan, 2015.
21. **Member** in the Advisory Board Committee, *12th Intl’ Conference on High Performance Optical Networks and Enabling Technologies (HONET’15)*, December 2015.
22. **Participated** in the *1<sup>st</sup> Emirates Digital Association for Women (EDAW111)*, April 11, 2015.
23. **Member** in the *Emirate Digital Association for Women (EDAW111)*, April 2015- till now.
24. **Keynote Speaker** in the International Conference on Science, Management, Engineering and Technology , March 18,2015.
25. **Participated in the workshop**, *ABET Program Assessment Workshop, WEEF Conference*, Dubai, Dec. 2014.
26. **Participated in workshop**, *SACSCOC Program Assessment Workshop*, AURAK, UAE 2014.
27. **Participated** in the *ABET (Accreditation Board for Engineering and Technology Training Workshop* 2014.
28. **Focal Point** for the project “*Achieving Equality in ICT Sector*”, funded by the UN-Women, 2011-2014.
29. **Member** in the steering committee of the *Arab Women in Computing*, 2011-Now.
30. **Member** in the *ARABWIC (Arab Women in Computing)* - UAE, 2011 till Now.
31. **Participated** in the *Cyprus Advanced HPC Winter Workshop 2012 Training*, 2012.
32. **Member** in the *evaluation committee of the fifth national technology parade*, Hashemite University, 2012.
33. **Member** in the *local organizing committee of the conference CITS Computer Information and Telecommunication Systems* – Amman – Jordan 2012.
34. **Member** in the *organizing committee of the Technological Festival*, Jordan, 2012.



35. **Member** in the *local organizing committee for the establishment of the national center of electronic investigation* – Hashemite University, 2011.
36. **Participated** in the *3<sup>rd</sup> International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN-2011)* [www.iasks.org/conferences/EUSPN2011](http://www.iasks.org/conferences/EUSPN2011) in Conjunction with *International Conference on Frontiers and Beyond in Information Technology* [www.iasks.org/conferences/FBIT2011](http://www.iasks.org/conferences/FBIT2011), Amman, Jordan 10-13 October, 2011.

#### **JOURNAL REVIEWER**

1. International Arab Journal of e-Technology
2. International Journal of Computer Engineering Research
3. Journal of Supercomputing

#### **PARTICIPATION IN CONFERENCES /WORKSHOP**

1. IEEE International Conference on Electronic and Computing Technologies and Applications (ICECTA'2017)
2. 1<sup>st</sup> workshop entitled *Boosting Opportunities Awareness for Women in STEM Education and Career Pathway*, January 13<sup>th</sup>, 2017, American university of Ras Al Kamiah, UAE
3. IEEE 5th International Conference on Electronic Devices, Systems and Applications (ICEDSA), 2016
4. IEEE 12<sup>th</sup> Intl' Conference on High Performance Optical Networks and Enabling Technologies (HONET'15), December 2015, Islamabad, Pakistan Dec 21-23, 2015
5. Professional Development in Assessment for Institutional Effectiveness, AURAK, Jan. 21, 2015
6. International Conference on Science, Management, Engineering and Technology, March 18, 2015
7. IEEE 11th HONET-PfE2014, North Carolina, USA, Dec 14, 2014
8. Fundamentals of Program Assessment Workshop - ABET, Dubai, Dec. 5-6, 2014
9. 2<sup>nd</sup> Women in computing workshop, 2013
10. 1<sup>st</sup> Women in computing workshop, 2012
11. 5th Global conference of Power Control and Optimization, 2011
12. Grace Hopper Celebration of Women in Computing 2006
13. International Conference on Computer Science and Engineering, 2006
14. International Arab Conference on Information Technology, ACIT2005

#### **DEVELOPED COURSES/PROGRAM/APPLICATION**

1. Developed a project entitled "Raising Awareness about Recycling Solid Waste" - May 2017
2. Developed a project entitled "The Domestic Treasure: Sustainability from a different perspective", 2016
3. Developed the electronic contents of the Photovoltaic Systems course – Under Tempus Project umbrella, 2013
4. Initiated programs to help under-privileged youth through volunteerism from the students in the Operating Systems class, 2010-2011 Under TEMPUS project umbrella.
5. Developed an application that helps the children with cerebral palsy, 2010.

6. Developed different e-courses for different subjects such as: Computer Fundamentals, Algorithms, and Operating systems, 2007-2009
7. Developed an online course in Software Engineering for the benefit of the female students in Saudi Arabia, 2006

#### **AWARDS**

1. The Best Green Campus Audit Award for the participation in the Sustainable Campus Initiative from Abu Dhabi Environmental Agency - 2016
2. The best renewable energy for the graduate project from ITSAF –2012.
3. E-learning presentation awards

#### **MASTER GRADUATE THESIS AND UNDER-GRADUATE PROJECTS**

Fall 2015 – 2016	UAE Parking Guide
Spring 2012 - 2013	Co-supervising Suzan Assaf – Master Student.
Fall 2012- 2013	Mobile Smart Home (MobSmartHome), Tracking Attendee Model via Bluetooth, Intelligent System of Controlling Automatic Door
Fall 2011-2012	Enhancing Compatibility of Bluetooth Technology using Bluetooth, Intelligent Prototype of Autonomous Parking.
Fall 2010-2011	Game Meter of Horror, Heart Patient Care Center,
Fall 2009-2010	Electronic Admission and Registration, XNA Blast.
Spring 2009-2010	Computerized Provider Order Entry
Fall 2008-2009	Electronic e-Bank, Computerized emergency room, AI Builder System
Spring 2008-2009	e-Infraction System, Smart Web Generator, Enhancing entertainment System

#### **PROFESSIONAL MEMBERSHIP**

**Member** in IEEE  
**Member** in Association of Jordanian Women Academics  
**Member** of ArabWIC (Arab Women in Computing), UAE Chapter and Jordan Chapter  
**The focal point** of the Hashemite University at EU Project Empowerment UN Women in Jordan (Cisco Academy.)

#### **REFERENCES**

Upon Request