## السيره الذاتيه لمعالى الأستاذ الدكتور عزام طلال سليط

وزير الاتصالات وتكنولوجيا المعلومات - حكومة دولة الدكتور عبد الله النسور، منذ أغسطس 2013 حتى مارس 2015.

- رئيس مجلس ادارة مركز تكنولوجيا المعلومات الوطني
  - رئيس مجلس ادارة صندوق توفير البريد
  - رئيس مجلس ادارة شركه البريد الأردني
- عضو اللجنة الوزارية الاقتصادية و لجنة التنمية الاجتماعية.

عميد - كليه الملك عبدالله الثاني لتكنولوجيا المعلومات - الجامعة الأردنية

أستاذ دكتور - علم حاسوب، الجامعة الأردنية، منذ كانون ثاني لعام 2005.

مدير مركز الحاسوب بما في ذلك مركز حاسوب مستشفى الجامعة الاردنية، 2007 - 2009.

رئيس - اللجنه التوجيهيه الفنيه العليا، شركه شبكه الجامعات الحكوميه، 2007-2009. مساعد عميد، كليه الملك عبدالله الثاني لتكنولوجيا المعلومات، الجامعة الأردنية، 2006 - 2007.

رئيس - علم الحاسوب, لجان الدراسات العليا و البحث العلمي, الجامعة الأردنية, 2007-2005

المدير التنفيذي للمعلومات CIO في مؤسسة حمد الطبية / وزارة الصحة، قطر، 2003 - 2005.

أستاذ دكتور بدوام جزئي، جامعة قطر، عام 2000 ولغاية عام 2005.

مدير مشاريع في مؤسسة حمد الطبية / وزارة الصحة، قطر عام 2000 ولغاية عام 2003.

عضو هيئه تدريس بدوام جزئي، قسم علوم الحاسوب، جامعة Wayne State ميشيغان، الولايات المتحدة الأمريكية، 1995 - 2000.

نائب رئيس للشئون الاستراتيجية ومدير الخدمات المهنية في شركة تريادا ليميتد، ميشيغان، الولايات المتحدة الأمريكية، 1999 - 2000

مدير إقليمي في شركة Information Builders ، ميشيغان، الولايات المتحدة الأمريكية، 1997 - 1999.

مدير أول تنفيذ في شركةInformation Builders ، ميشيغان، الولايات المتحدة الأمريكية، 1996 - 1997.

معيد - قسم علم الحاسوب في جامعة Wayne State ، ميشيغان، الولايات الأمريكية المتحدة، 1990 - 1995.

مدير فني - شركة MetLife ، ساوث فيلد، ميشيغان، 1993 - 1996.

مهندس برمجيات - شركة EPCOM Corporation ، تروي، ميشيغان، 1990 - 1993.

باحث - قسم تصميم النقل المتقدم، شركة Ford Motors ، ليفونيا، ميشيغان / جامعة 1992 - قسم تصميم النقل المتقدم، شركة 1992 - 1992.

معيد - قسم علوم الحاسوب، جامعة الملك فهد للبترول والمعادن، عام 1987 ولغاية عام 1989.

محلل نظم - الشركة السعودية الموحدة للكهرباء، 1989 - 1990

قام بتالیف اکثر من ستین بحثا فی مجلات و مؤتمرات عالمیه مفهرسه و محکمه

محكم في العديد من المجلات و المؤتمرات العالميه

حائز على العديد من الجوائز العالمية والمحلية

مرفق السيرة الذاتية المفصلة باللغة الإنجليزية.

**Biographical Sketch** 





Prof. Azzam T. Sleit

azzam\_sleit@yahoo.com

Azzam Sleit is the Former Minister of Information and Communications Technology (20013-2015). He is currently functioning as the Dean of King Abdulla II School for Information Technology and a Professor of Computer Science with the University of Jordan, where he had also functioned as the Assistant President and Director of the Computer Center (2007-2009). Before joining the University of Jordan in 2005, Dr. Sleit was the Chief Information Officer at Hamad Medical/Ministry of Public Health, Qatar. Dr. Sleit has over twenty five years of experience and leadership working at all levels of government, private and international sectors.

Before joining Hamad Medical, Dr. Sleit was the Vice President of Strategic Group & Director of Professional Services of Triada, USA, where he introduced the NGram Technology and Associative Memory Structures. The application of NGram technology helped Ford Motor Company to identify patterns of auto-parts failure and State of Michigan to recognize patterns of child abuse. Dr. Sleit served as the Regional Manager of Professional Services with Information Builders, USA. He oversaw six branches in the Midwest region of the United States with responsibility for program design and oversight of all projects in the region. From 1993 to 1996, Dr. Sleit was in charge of MetSource, a strategic unit of Metlife responsible for providing outsourced IT health insurance services for large companies such as AT&T, ABB.

Dr. Sleit has participated in numerous research activities related to Cloud Computing, Imaging Databases, Data Mining, Health and Management Information Systems and Software Engineering. He authored more than sixty refereed research papers published in reputable journals and conferences. Since 1987, Dr. Sleit has taught Computer Science courses at various universities in the United States and Middle East maintaining high teaching standards.

Dr. Sleit holds B.Sc, M.Sc. and Ph.D. in Computer Science. He received his Ph.D. in 1995 from Wayne State University, Michigan.

### **CURRICULUM VITAE**

### 1. Personal Data

Name Azzam Talal Sleit, Ph.D.

Date of Birth June 9, 1966

Marital Status Married with Children

Citizenship Jordan

#### **Current Positions:**

Dean of King Abdulla II School of Information Technology. Professor of Computer Science, University of Jordan

## 2. Fields of Specialization

- Cloud Computing
- Imaging Databases
- Information Retrieval and Data Mining
- Software Engineering and Complexity Metrics
- Health Information Systems
- Picture Archiving and Communications

### 3. Academic Qualifications, Awards and Membership

- **Ph.D. in Computer Science (GPA: 3.95/4.00),** Wayne State University, Detroit, Michigan February 1995.
- M.Sc. in Computer Science & Engineering (GPA: 4.00/4.00), King Fahad University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia - 1989.
- B.Sc. in Computer Science & Engineering (with high honors), King Fahad University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia - 1987.
- Gibralter Publishing Outstanding Award for Professional and Civic Achievements, 1999.
- Mark of Excellence: Information Technology Strategies and Professional Services Management, Information Builders, USA – 1998.
- Mark of Excellence: Software Specialty Qualification from IBM BESTeam –1996-2000.
- Member: Hamad Medical Corporation Information Technology Steering Committee, 2000-2005.
- Member Hamad Medical Corporation Policies and Standards Governance Committee, 2003-2005.
- Member: Hamad Medical City Information Technology Infrastructure Committee, 2003.
- Member: Association of Computing Machinery since 1990.
- Member: American Management Association since 1995.
- Member: Society of Computing and Radiology (SCAR) since 2003.
- Listed in Who's Who International Professionals, 1999.

#### 4. Positions Held

- Dean of King Abdulla II School of Information Technology
- Minister of Information and Communications Technology, Government of Jordan, from 2013-2015.
  - Chairman of the Board of Directors Postal Saving Fund.
  - Chairman of the Board of Directors National Information Technology Center.
  - Chairman of the Board of Directors Jordan Postal Company
  - Member of the Economic and Social Development Ministerial Committees.
- Professor of Computer Science, University of Jordan, Amman, Jordan, since Jan 2012.
- Director of Computer Center including university teaching hospital, University of Jordan, 2007 2009.
- Chairman, JUNET Advisory Committee, 2007-2009,
- Associate Professor, University of Jordan, Amman, Jordan, 2008 2012.
- Assistant Dean, KASIT, University of Jordan, 2006 2007.
- Chairman, Computer Science Graduate and Research committees, 2005-2007.
- Chief Information Officer, Hamad Medical/Ministry of Public Health, Qatar. 2003 – 2005
- Part-Time Professor, University of Qatar, 2000 2005.
- Projects Manager, Hamad Medical/Ministry of Public Health, Qatar, 2000 – 2003.
- Part-Time Professor, Computer Science Department, Wayne State University, Michigan, USA, 1995 2000.
- Vice President of Strategic Group & Director of Professional Services, Triada Ltd., Ann Arbor, Michigan, 1999 2000.
- Regional Manager, Information Builders, Troy, Michigan, 1997 1999.
- Senior Implementation Manager, Information Builders, Troy, Michigan, 1996 – 1997.
- Teaching Assistant, Computer Science Department, Wayne State University, Michigan, USA, 1990 1995.
- Technical Manager, MetLife, Southfield, Michigan, 1993 1996.
- Project Manager, EPCOM Corporation, Troy, Michigan, 1992 1993.
- Software Engineer, EPCOM Corporation, Troy, Michigan, 1990 1992.
- Research Associate, Advanced Transmission Design Department, Ford Motor Company, Livonia, Michigan / Wayne State University, 1990 – 1992.
- Teaching Assistant, Computer Science Department, King Fahad University of Petroleum and Minerals, 1987 1989.
- Systems Analyst, Saudi Consolidated Electricity Corp (SCECO), 1988

   1990.

## 5. Conferences/Journals Program Committees

- Attended various Ministerial ITU conferences between 2013 and 2015.
- Editorial Board, International Journal of Digital Content Technology and Its Applications, since 2009.
- Technical Editor, Journal of Trends in Applied Sciences Research, (2005 2015).
- Technical Editor, Letters of Pattern Recognition, Elsevier, (2006-2007).
- Technical Editor, Asian Journal of Information Management, (2005 2010).
- Editor, Journal of Applied Sciences, (2005 2007).
- International Committee, WSEAS Conference, Rodos Island (2005 2009).
- Program Committee (member), International Conference on Knowledge Generation, Communication and Management (KGCM), Florida, USA, since 2007.
- Program Committee (member), The World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI), USA, since 2006.
- Program Committee (member), International Conference on Digital Communications and Computer Applications (DCCA2007), Jordan, 2007.
- Program Committee, International Conference on Digital Contents and Applications (DCA2015), Korea.
- Editor: HMC Monthly Bulletin, Qatar, (2000 –2005).
- Member Hamad Medical Corporation Policies and Standards Governance Committee, 2003.
- International Program Committee: IASTED on Software Engineering, (1995 2003).

# 6. Research & Development Projects (Funds over one million Dollars)

- Deploying 4G/LTE, Jordan, 2015.
- E-government Project, Jordan, 2013-2015.
- National Broadband Network Project, Jordan, 2013-2015.
- Training and Developing Information Technology and Communications graduates, Jordan, 2013-2015.
- Upgrading the Data Center of the University of Jordan including network, servers, data storage and back up, email, website portal services, and security. Project Duration: 2 years (2007 - 2009), Total Budget: \$5 million, Jordan.
- Planning & Developing a complete Information Technology Software and Hardware Solution to provide medical Information at points of care, Project Duration: 5 years (2000 - 2005), Total Budget: \$10 million, Hamad Medical, Qatar.

- Medical Commissioning and Fitness Certification, Project Duration: 1 year (2002 - 2003), Total Budget: \$1 million, Ministry of Public Health, Qatar.
- Interfacing E-Government with E-Health and National Health Data Base, Duration: 2 years (2003 - 2005), Total Budget: \$1 million, Ministry of Public Health, Qatar.
- Applying Associative Memory Structures to Identify Auto-Parts Pattern Failure, Duration: 1 year (1999 – 2000), Total Budget: \$3 million, Ford Motor Company, USA.
- NGram Technology for Data Mining, Duration: 1 year (1999 2000), Total Budget: \$1.2 million, Triada, USA.
- K-Mart's Y2K, Duration: 2 years (1997 1999), Total Budget: \$2.5 million, K-Mart/ Information Builders, USA.
- Planning & Developing Health Information and DSS Systems, Duration:
   3 years (1995 1998), Total Budget: \$5 million, Henry Ford Health Systems, USA.
- Professional Services Methodology & Guidelines, Duration: 1 year (1996 – 1997), Total Budget: \$1 million, Information Builders, USA.
- CRM, Enrollment & Eligibility, Document Manager and Billing, Duration: 3 years (1993 1995), Total Budget: \$4.2 million, Metlife, USA.
- SLC3: Systems Lifecycle 3, Duration: 1 year (1992 1993), Total Budget: \$1 million, Electronic Data Systems, USA.

## 7. Academic Experience

Judged by many standards, my teaching record is considered outstanding. I have taught a variety of subjects at the undergraduate and postgraduate levels, small classes (less than 10 students) and large ones (more than 200 students), supervised a number of graduate and Honors students, many of whom now occupy senior positions in the USA and Middle East. I have initiated, planned, introduced and developed many courses in various universities. I believe that my teaching approach, methodology and style are all geared towards simplifying the subject matter of the relevant course and achieving maximum understanding while maintaining academic rigor. The results of my teaching evaluation in various universities suggest excellent teaching performance, for both small and large classes. The quality of my teaching is evident from the fact that I maintained an overall excellent evaluation for the classes I taught at Wayne State University and University of Jordan.

#### 2005 - Present

Computer Science Department, King Abdulla II School for Information Technology (KASIT), Jordan University.

Professor: since January 2012 Associate Professor: 2008 – 2012 Assistant Professor: - 2008.

**Undergraduate Courses**: Analysis of Algorithms, Image Processing, Programming Languages Design & Implementation, and Database Management Systems, Project Management.

**Graduate Courses**: Advanced Analysis of Algorithms, Databases and Digital Image Processing.

#### **Master Theses Supervision:**

- Eshraq Bani Salama, A Clustering Approach for Reconstructing Cross-Cut Shredded Documents, 2013.
- Esam Nsour, An Improved Node Splitting Algorithm in R-tree, 2011.
- Shorouq Sabbah, Indexing Spatio-Temporal Databases, 2011.
- Sawsan AbuSharkh, Enhancing Modularity-based Graph Clustering Algorithm, 2010.
- Afaf Tareef, Improving the Robustness of Image Watermarking Against Attack, 2010.
- Mariam AlSharif, Evaluation of Automatic Human Identification Algorithms Using Facial Features, 2010.
- Moath Hajaya, Spoken Language processing for Video Archives of Lectures, 2010.

- Yagoub Masaad, Performance Evaluation of Transmission Power Control (TCP) in Mobile Wireless Ad Hoc Networks, 2010.
- Khitam Jbara, Knowledge Discovery In Al-Hadith Using Text Classification Algorithm, 2009.
- Rahmah Jabay, Object Recantation Based on Dominant points Identification, 2009.
- Rabab AbuHirra, Lower- Face verification using Adaptive Correlation Fiter, 2009.
- Nashwan Rumaima, A Technique for Temporal DBMS Implementation as a stream on Top of an existing non-temporal DBMS, 2009.
- Inas Abuqadoom, Automated Real locator of Replicas Over Mobile Ad HOC Networks, 2009.
- Oraib Miqdadi, A spatial data structure for tracking mobile and fixed nodes, 2009.
- Ruba Soab, Secure Partially Spatial Disjoint Multi path Routing Protocol Over MANTEs, 2008.
- Inas Juma'a, Detecting Fuzzy Duplicates in Datasets, 2008.
- Kamal AbuHassan, An Algorithmic Approach for Detecting Matrix Containment, 2007.
- Ala'a Baara, Applying Text Mining Algorithms for Knowledge discovery on the Holy Quran Text, 2007.
- Saleh Saloos, Efficient Processing of Database Join Based on Matrix Containment, 2007.
- Loai Nemir, A Histogram Based Speaker Identification Technique, 2006.

## 2007 – 2009 Director of the Computer Center and University Teaching Hospital

Chairman of the Technical Advisory Committee for all state universities. Junet

**Technical Manager of the Unified Admission Committee**Managing staff of more than 150 employees and responsible for planning and executing the information technology strategy for Jordan University including:

- Establishing the information technology canter vision supported with high reliability and availability including power supply, services, communication lines and processing machines.
- Reorganizing the Computer Center staff into a functional organizational chart.
- Planning, budgeting, commissioning, and managing the university network upgrade with QoS, bandwidth management and central control.

- Planning, budgeting, commissioning, and managing the university network security project.
- Planning, budgeting, commissioning, and managing the servers, SAN, and tape library project.
- Commissioning and overseeing the upgrade of the HIS system for the university's teaching hospital.
- Overseeing the email upgrade into Microsoft Exchange project.
- Overseeing the web migration project into Microsoft Sharepoint technology including the creation of employee, student, and embassy portals.
- Migrating the student information system into Oracle technology with self-service capabilities.
- Directing the development of the purchasing, inventory control, and fixed assets system.
- Enhancing the laboratories by providing state of the art equipments and qualified staff.

#### 2006 - 2007 Assistant Dean, KASIT, Jordan University.

## 2000 – 2005 Part-Time Professor, Computer Science Department, Qatar University.

Teaching courses including Management Information Systems, Computer Ethics, Multimedia Systems, Advanced Database Management Systems, Discrete Mathematics and others.

## 1990 - 1999 Part-Time Professor, Computer Science Department, Wayne State University.

Teaching graduate and undergraduate courses including Database Systems, Expert Systems, Software Engineering, Data Structures, Systems Analysis and Design, and Analysis of Algorithms.

### 1987 – 1989 Teaching Assistant, Computer Science Department, King Fahad University of Petroleum and Minerals.

Teaching undergraduate courses including Programming in FORTRAN, C and Pascal.

#### 1990 – Pres Misc. Courses:

Project Management, Databases, Data Warehousing and Data Mining, Decision Support Systems, Data Modeling, E-Commerce / E-Business Implementation, and Object-Oriented Design.

## 8. Industry Experience

## 2000 – 2005 Hamad Medical/Ministry of Public Health (HMC), Doha, Qatar

## Chief Information Officer reporting to the Minister of Public Health and Managing Director.

- Responsible for planning, organizing, staffing, directing and controlling corporate-wide information technology policies to ensure total quality management.
- Developing and executing a strategy for developing hardware and software infrastructure based on high speed networks with wireless capabilities, array of servers with storage area network (SAN), and integrated Eros consisting of Health Information Management Systems (HIMS), Finance, Materials Management and Human Resources software.
- Periodically, presenting to the board of directors the status of IT and progress made to achieve corporate objectives. Participating in helping HMC achieve certification with JCAHO standards.
- Contracting, evaluating, establishing, and negotiated alliances with software and hardware vendors.
- Directing and evaluating corporate quality improvement efforts.
- Developing RFP's and RFI's for several hardware and software solutions.
- Direct supervision for the implementation of comprehensive health information systems as well as management information systems with management responsibility for more than 100 analysts, programmers and trainers.
- Developing and executing the training strategy for staff including physicians, managers, lab/radiology technicians, and nurses.
- Architecting and executing innovative new projects for Medical Records, Ambulatory care, CSSD, Cardiology, Radiology Information System, and Picture Archiving & Communications (PACs) for all facilities resulting in major improvement in services and quality.

#### 1999 – 2000 Triada, Ltd, Ann Arbor, Michigan.

### **Vice President of Strategic Group & Director of Professional Services**

- Defining Triada's strategy in E-Business, Knowledge Discovery and Pattern finding for large databases. Solutions are provided for Ford Motor Company, Compaq, Cisco, State of Michigan, Illinois, and New York State Department.
- Leadership role in creating Triada's patented technology (i.e. NGram) to transform volumes of business records into knowledge in the form of Associative Memory Structures.

### 1996 – 1999 Information Builders, Troy, Michigan Regional Manager for the United States Midwest Group

- Responsible for all professional-services activities in the Midwest area more than 6 states.
- Strategic planning, profit and loss, financial activities, and resource allocation/utilization.
- Technical/management administration, leadership and long-term business planning.
- Developing a professional-services branch in Michigan with a margin profit of 25% and revenue growth of 70% in 1997 and 90% in 1998.
- Developing a team of highly trained professionals of Implementation Managers, Operations Managers, Systems Engineers, and Developers. The team successfully delivered Data Warehousing, Web, ERP, and Y2K solutions to several customers including Henry Ford Health Systems.
- The Midwest Region led the development of Information Builders' Y2K strategy using WALDO and SiteAnalyzer in 1998.
- The Midwest Region led the development of Information Builders' web and e-business solutions using WebFOCUS.

#### **Senior Implementation Manager**

Responsibility included:

- Overseeing all projects of Detroit's Professional Services Branch and maintaining relationships with client management.
- Planning and managing the implementation of the Health Management System and DSS for Henry Ford Health Systems.
- Planning and managing the implementation of the Guaranteed Employment Number System for Ford Motor Company (completed April 1997).
- Overseeing the implementation of the Year 2000 project of Prince, Holland and K-Mart.
- Conducting and coordinating presentations for clients illustrating Information Builder's software development / management methodology as System Integrator.
- Leadership role in developing the Information Builders' Professional Services Methodology and Guidelines (PSMG).

## 1993 - 1996 Senior Technical Manager, MetLife, Southfield, Michigan Responsibility included:

- Overseeing the client-server unit and making strategic decisions and plans for long-term solutions.
- Writing proposals and conducting presentations.
- Planning and managing the strategic client-server core product of the unit, a full suite consisting of generic Customer Service, Enrollment & Eligibility, Document Manager and Billing. All components were completed before schedule and under budget. The tools recommended

- for the project were Power Builder, MS SQL Server, MDI, Windows NT, and ERWin.
- Planning and managing MET I&R; an HMO Billing client -server application for MetLife. Also, negotiated and managed the process of linking the system to the mainframes in New York.
- Planning and managing the customization process of the generic Customer Service system for ABB for benefits administration in Hamden, CT.
- Developing, maintaining, and conducting in-house training classes including SQL Server, ERWin, BPWin, PowerBuilder, Database Modeling, and Object-Oriented Design.

## 1990 - 1993 Project Manager, EPCOM Corporation, Troy, Michigan. Responsibility included:

- Designing and developing systems under PLEXUS / Informix.
- Providing a set of tools for the creation and operation of image and data processing applications running on client workstations in Windows and communicating over LANs to UNIX based SUN workstation servers using Sybase and FileNet.
- Applying Enterprise Engineering methodologies to re-engineer five departments.
- Teaching classes such as Unix, Client-Server Systems, Object-Oriented Design and Relational Databases for professionals from Ford Motor Company, GM and Chrysler.

Project Manager (Senior SE), EDS, Southfield, Michigan. Responsibility included:

- Maintaining relationships with client management and development teams.
- Evaluating, recommending and overseeing the implementation of a multi-site financial system across a Wide Area Network over 4 states.

Senior Consultant/Project Manager, Dana Computer Services, Dana Corporation, Toledo, Ohio.

#### Responsibility included:

- Evaluating the Management Resource Planning (MRP) system for monitoring executive's efficiency running in DOS, RBase, and Pascal.
- Redesigning and developing the MRP system to run in a client/server, Sybase, Power Builder platform.

Senior Consultant/Project Leader, Commonwealth Research Group, Canton, Michigan.

Responsibility included:

- Designing and analyzing a distributed multimedia solution for a Real Estate application.
- Supervising programmers during the coding stage.
- Integrating, QA, and testing the system.

# 1990 - 1992 Research Associate, Advanced Transmission Design Department, Ford Motor Company, Livonia, Michigan / Wayne State University.

Responsibility included the application of constraint satisfaction techniques in automating the process of designing automatic automobile power transmissions. The basic result was rediscovering two well-known 4R-speed automatic transmissions, Axod and Hydramatic.

#### 1988 - 1990 System Analyst, Information Center, SCECO.

Responsibility included:

- Analyzing, prototyping, and designing a Vehicle Control System.
- Programming systems under IDMS/R on IBM 3090.
- Leading a task force for developing the analysis and design standards and conventions for the information center.
- Participating in the analysis and programming of developing an HR system under DB2.

## 9. Publications Profile Refereed Journals:

- 1. R. Jobay, <u>Azzam Sleit</u>, Quantum Inspired Shape Representation for Content Based Image Retrieval, Journal of Signal and Information Processing 5(2), 2014, pp 54-62.
- 2. <u>Azzam Sleit</u>, E. Al-Nsour, Corner-Based Splitting: An Improved Node Splitting Algorithm for R-Tree, Journal of Information Science 40(2), 2014,pp. 222-236.
- 3. I. Abuqaddoum, Azzam Sleit, W. AlMobaideen, Automatic Re-Locator of Replicas Over Mobile Ad Hoc Networks, International Journal of Computer Networks & Communications 6(1), 2014,
- 4. <u>Azzam Sleit</u>, N Misk, F Badwan, T Khalil, CLOUD COMPUTING CHALLENGES WITH EMPHASIS ON AMAZON EC2 AND WINDOWS AZURE, International Journal of Computer Networks and Communications 5 (5), 2013, pp. 35-44.
- 5. <u>Azzam Sleit</u>, Y. Massad, M. Musaddaq, An alternative Clustering Approach for Reconstructing Cross Cut Shredded Text Documents, Telecommunication Systems Journal, Springer, DOI: 10.1007/s11235-011-9626-x, Vol. 52, 2013, pp. 1491-1501.
- W. Almobaideen, D. Al-Khateeb, <u>Azzam Sleit</u>, M. Qatawneh, Improved Stability Based Partially Disjoint AOMDV, International Journal of Communications, Network and System Sciences, vol. 6, 2013, pp. 244-250.
- 7. W Almobaideen, R Al-Soub, <u>Azzam Sleit</u>, MSDM: Maximally Spatial Disjoint Multipath Routing Protocol for MANET, Communications and Network Vol. 5, 2013, pp. 316-322.
- 8. O. Adwan, <u>Azzam Sleit</u>, M. Qatawneh, Implementing a Total Healthcare Enterprise Resource Planning System, International journal on information, 16(6(b)), 2013, pp. 3997-4004.
- 9. M. Qatawneh, Y. Massad, M. Musaddaq, <u>Azzam Sleit</u>, A Uniform Noise Median Filter Based on a New Type of Filtering Window, Information Journal, Vol. 15, No. 12, 2012, pp. 699-706.
- 10. <u>Azzam Sleit</u>, S. Abusharkh, R. Etoom, Y. Khero, An Enhanced Semi-Blind DWT-SVD-Based Watermarking Technique for Digital Images, The Imaging Science Journal, Maney Publishing UK, DOI: 10.1179/1743131X11Y.0000000010, Vol. 60, No. 1, 2012, pp. 29-38.
- 11.B. Mahafzah, <u>Azzam Sleit</u>, N. Hamad, E. Ahmad, T. Abu-Kabeer, The OTIS hyper hexa-cell optoelectronic architecture, Computing Journal, Springer, DOI: 10.1007/s00607-011-0177-5, Vol. 94, 2012, pp. 411-432.
- 12. A Latif Abu Dalhoum, Thaer Kobbay, <u>Azzam Sleit</u>, Enhancing QuickSort Algorithm using a Dynamic Pivot Selection Technique, Wulfenia 19 (10), 2012, pp. 543-552.
- 13. <u>Azzam Sleit</u>, A. Abu-Dalhoum, M. Qatawneh, M. Al-Sharief, R. Al-Jabaly, O. Karajeh, Image Clustering using Color, Texture and Shape

- Features, KSII Transactions on Internet and Information Systems, Vol. 5, No. 1, 2011, pp. 211-227.
- 14. <u>Azzam Sleit</u>, R. Abu-Hurra and W. AlMobaideen, Lower-quarter-based face verification using correlation filter, The Imaging Science Journal, The Royal Photographic Society Maney Publishing, Vol. 59, No. 1, 2011, pp. 41-48.
- 15. W. Almobaideen, K. Hushaidan, <u>Azzam Sleit</u>, M. Qatawneh, A Cluster-Based Approach for Supporting QoS in Mobile Ad Hoc Networks, International Journal of Digital Content Technology and its Applications, Vol. 5, No. 1, 2011, pp. 1-9.
- 16. M. AL-Akhras, I. ALMomani, <u>Azzam Sleit</u>, An Improved E-Model Using Artificial Neural Network VoIP Quality Predictor, Neural Network World Journal, Vol. 21, No. 1, 2011, pp. 3-26.
- 17. H. Al-Hasan, M. Qatawneh, <u>Azzam Sleit</u>, W. Almobaideen, EAPHRN: Energy-Aware PEGASIS-Based Hierarchal Routing Protocol for Wireless Sensor Networks, Journal of American Science, Vol. 7, No. 8, 2011, pp. 753-758.
- M. Qatawneh, H. Bdour, S. Sabah, R. Samhan, <u>Azzam Sleit</u>, J. Alqatawna, W. al-Mobaideen, An Alternative Routing Algorithm for Hex-Cell Network, Information Journal, Vol. 14, No. 10, 2011, pp. 3499-3514.
- 19. M. Qatawneh, <u>Azzam Sleit</u>, M. Al-Zoubi, A. Fetyani, S. Al-Sharaeh, An Efficient Generalized Multi-Fault Tolerant Mapping Algorithm onto a 3-D Torus Interconnection Topology, World Applied Sciences Journal, IDOSI Publications, Vol. 12, No. 1, 2011, pp. 106-113.
- Azzam Sleit, Chapter 17-Watermarking: Software & Hardware Implementation Techniques, Computational Techniques and Algorithms for Image Processing Edited By: S. Ramakrishnan (ISBN: 978-3-8433-5802-6), Lambert Academic Publishing (LAP), Germany, 2010, pp. 535-552
- 21. <u>Azzam Sleit</u>, S. Al-Adaileh, N. Al-Omari, H. Hurani, Extending the Cluster Map Algorithm Using Automated Cluster Identifier, International Journal of Computers and Applications (ISSN: 1206-212X), Acta press, DOI: 10.2316/Journal.202.2010.2.202-2790, Vol. 32, No. 2, 2010.
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