

CURRICULUM VITAE



Sameer M. Bataineh

*Professor of Computer Engineering
Department of Computer Engineering
Jordan University of Science and Technology, Jordan
Email: samir@just.edu.jo;*

I. EDUCATION

1992 Ph.D	State University of New York at Stony Brook, USA.	Computer and Network Engineering (<i>Performance Evaluation of Parallel Computer and Network Systems</i>)
1990 M.Sc	State University of New York at Stony Brook, USA.	Computer and Network Engineering
1986 B.Sc	Syracuse University, USA.	Electrical Engineering

II. EXPERIENCE

II.1 ACADEMIC EXPERIENCE

Professor 1/9/2012 - Present	Jordan University of Science and Technology (JUST), Department of Computer Engineering, Jordan
Professor 31/1/2010 – 31/8/2012	United Arab Emirates University, College of Information Technology, UAE.
Professor 2/7/2008 - 31/1/2010	Khalifa University of Science, Technology and Research (KUSTAR), Now Khalifa University, UAE.
Professor 31/5/2005-1/7/2008	Jordan University of Science and Technology (JUST), Department of Computer Engineering, Jordan
Associate Professor 1/9/2002 – 30/5/2005	Jordan University of Science and Technology (JUST), Department of Computer Engineering,

Associate Professor
1/9/1998 31/8/2002

United Arab Emirates University (UAEU),
Department of Electrical Engineering, UAE.

Associate Professor
4/1/1998 31/8/1998

Jordan University of Science and Technology (JUST),
Department of Electrical Engineering, Jordan.

Assistant Professor
9/1992 – 3/1/1998.

Jordan University of Science and Technology (JUST),
Department of Electrical Engineering, Jordan.

**Teaching and Research
Assistant**
8/1988- 6/1992.

State University of New York at Stony Brook, USA.

Trainer
1/1986-6/1988.

Jordanian Army, Army School of Wireless and
Telecommunication, Jordan.

II.2 ADMINISTRATIVE EXPERIENCE

Dean

9/2014- 9/2016

*Faculty of Graduate Studies
at Jordan University of
Science and Technology*

Dean Faculty of Graduate Studies at Jordan University of Science and Technology. During the two years I was in the office I have accomplished the following:

1. Faculty of Graduate Studied become the first Paperless College at the university.
2. We have worked into two major projects under the umbrella of Faculty of Graduate Studies Reform. We proposed a new organizational chart that adopts the most recent common functions of the graduate studies at comparable universities. In addition, the new organizational chart deletes all repetitive functions by other departments or units to simplify the process for the students and minimize many tasks execution time. The new chart gives more identity for the Faculty of Graduate Studies.
3. I have introduced a new well-organized procedure for the MS thesis process which contains three major phases (SAGES). In addition, a new well-specified assessment procedure to promote the quality of the theses. For that we introduced a totally new approach to almost all steps of thesis process and new forms:
STAGE 1: Thesis Proposal Submission.
STAGE 2: The Candidacy Qualification Examination (CQE).
STAGE 3: Thesis Defense.
Graduate Studies Steps
Thesis Procedures Flow Chart
Form A: Thesis Proposal Form
Form B: Thesis Proposal Evaluation Form
Form C: Candidacy Qualification Form
Form D: Candidacy Qualification Examination Form
Form E: Thesis Defense Evaluation Form
A new booklet which includes all steps was approved by the dean's council. Accordingly, we have made a major change for the rules and regulations of the Faculty of Graduate Studies to address the new changes.

4. In addition, we proposed a yearly competition workshop in which we will select the best three theses in the university. Each college has to make its own selection to nominate the best MS thesis to be considered for university competition.
5. We also joined the 3MT University Group and we asked also the colleges to nominate the best 3 3MT videos. There will be a selection process to select the best 3MT video in the university to participate in the 3MT worldwide competition.

Acting Dean,
9/2012- 9/2013

*Faculty of Information
Technology at UAEU.*

Acting Dean in addition to an Associate Dean for Academic Affairs at the Faculty of Information Technology at UAEU.

1. A remarkable achievement was to propose a 4 new programs. The programs were internationally evaluated and strongly recommended and praised by the three internationally recognized experts in the field. The programs were adopted by the College and now you can see that there is a transform in the college towards the new programs.
2. In addition, I proposed a revolutionary change in the structure of the college by introducing a department structure to host the proposed programs rather than the track option.

**Associate Dean and
Head of Promotion
Committee.**

2/2010-9/2012

*Faculty of Information
Technology at UAEU.*

During the two and a half years, I have been a Professor and Associate Dean for Academic Affairs at the Faculty of Information Technology at UAEU, I have made significant contributions to FIT and have been involved in all of its major activities and initiatives. I therefore have a deep knowledge of the college, its people, programs, initiatives, challenges and opportunities. Moreover, I have a strong sense of how the college can reach the next level of excellence, and I am excited by the possibility of being able to work with my colleagues in FIT, with colleagues from other units in the university, with our administration, and with our students and stakeholders to help FIT to move forward significantly in the coming years.

Program Manager

7/2008-

1/2010

*Khalifa
University,
UAEU*

In 2008, I was the founding director of the foundation program at Khalifa University of Science, Technology and Research (KUSTAR), now Khalifa University. I interviewed and hired about 29 faculty members, instructors and administrators, and started the program in fewer than 8 weeks. The program was targeted to begin in the first week of September 2008 and the job was assigned to me on July 2, 2008. This was summer vacation time, when it was extremely hard to communicate and find available, qualified faculty and staff. However, everything went well and I managed to meet the deadline.

**Head of Dean's
Executive Committee**
2006-2008

I initiated a cooperative effort among all the deans and department chairs of computer and information science and technology from universities throughout Jordan. The initiative led to the forming of an executive committee for all IT deans in Jordan. I was elected to head the executive committee. The main objective of the committee is to unify the effort of all academic institutes and interact with the government and the industrial partner to modify the curricula to answer the national need and to meet the international standard. The committee also should interact with other Sister colleges in Arab countries through the Association of Arab Universities to synchronize, consolidate and exchange our knowledge and efforts in the field of information Technology. As an outcome of our efforts in the executive committee, we were able to register Jordan information and computer community as a first member in the Society of the Colleges of Computing and Information which operates under the Association of Arab Universities. Several Arab countries adopted the idea and joined the Society of the Colleges of Computing and Information.

Dean 2004-6/2008 <i>College of Computer and Information Technology, Jordan University of Science and Technology</i>	<p>During 2004-2008 I served as Dean of College of Computer and Information Technology (CCIT) at Jordan University of Science and Technology (JUST). With over 60 faculty members, over 2000 undergraduate students and about 250 graduate students at that time, the CCIT is considered one of the largest colleges at JUST. The college had five departments: Computer Engineering, Computer Science, Computer Information Systems, Network Engineering and Security and Software Engineering. The CCIT has 7 undergraduate programs and two master's programs. In addition to my key role of overseeing the student progress and developing and implementing academic activities, the college was in charge of running all on-line entrance placement tests for new students and executing and managing all on-line exams for all colleges at JUST. Moreover, the CCIT in collaboration with the registrar's office ran and managed the registration for over 22,000 students for three semesters per year (including summer). So I also had to manage a team of about 50 lab engineers and programmers distributed over 20 labs throughout the campus in order to execute such a huge and highly critical task.</p>
Chairman 2002-2004 <i>Computer Engineering Department Jordan University of Science and Technology</i>	<p>Chairman of the Computer Engineering Department at Jordan University of Science and Technology. The undergraduate enrollment in the Department is about 600 students. The graduate program offers Master of Science (M.S.) in Computer Engineering.</p>
Key Committee Member 1997-1998	<p>A key member of a committee Chaired by the University Vice Chancellor at Jordan University of Science and technology (JUST) to establish the College of C o m p u t e r a n d Information Technology (CCIT) at JUST. I played a primary role in convincing the university administration to adopt the idea and establish the college.</p>

Sameer M. Bataineh

Ph.D. 1992

samir@just.edu.jo

Head of Computer Branch

1994-1996

Head of Computer Branch at the Department of Electrical Engineering at Jordan University of Science and Technology, Jordan.

Chair and Co-Chair of International Conferences.

Abu Dhabi 2000, Jordan 2006m Al Ain 2012.

Army Officer

1986-1988

Lieutenant: Trainer in the Jordanian Army.

II.3 COMMITTEES: UNIVERSITY WIDE MANAGEMENT RESPONSIBILITIES AND EXPERIENCE:

II.3.a National Level (Examples)

Appointed By:

Role and Responsibilities

Minister of Higher Education and Scientific Research.

Chair: A committee is assigned to review and set accreditation criteria for the computer engineering major to all universities in Jordan.

Minister of Higher Education and Scientific Research.

Chair: A committee to set the competency exam for all universities in Jordan (Private and Public) in the computer engineering major.

Minister of Higher Education and Scientific Research.

Chair: A committee to set the body of knowledge for the computer engineering field to be used as a reference by the accreditation committee members to grant accreditation for Computer Engineering programs.

Minister of Higher Education and Scientific Research.

Member: An "Opening" (initial) National Scientific Research Support Fund Committee. The committee is Chaired by the Ministry of Higher Education and Scientific Research Secretary General. I was the national representative of the Computer and Engineering fields in the committee. The committee yearly budget is about 15 million JD (78 AED Million). Being the first (initial) committee , we had to set all bylaws of the Scientific Research Support Fund in terms of Project/proposal review and evaluation, Selection process, Proposal approval process and criteria, Research areas and activities, Research priorities, Grant management, Affiliated universities role and responsibilities and Reporting requirements.

Director of National Center of Human Resource Development in Jordan.

Member. The committee was Chaired by the President of Yarmouk University, a former government Minister. The committee was asked to develop and write a Higher Education Indicators (HEI) report in collaboration with the Canadian International Development Agency (CIDA). The purpose for developing the report was to create KPIs for the policy-making process in the higher education sector and to establish national benchmarks comparable with international indicators.

Minister of Education

Member. Member of the general assembly consortium of the national committee for science, culture and education. The Consortium is chaired by the Minister of Education. The committee activities is coordinated with Arab League Educational, Cultural And Scientific Organization (ALECSO)

Minister of Higher
Education and
Scientific Research.

Member. A committee to lay down the recognition policy of distance learning institutions. The policy is to be adopted by the Ministry of Higher Education to be used as a benchmark and a reference to recognize the distance learning institutions for Jordan and the world.

Minister of Education

Member. Member of the executive committee of the national committee for science, culture, and education.

Minister of Education

Chair. A committee to review and monitor the process of introducing the computer in teaching the Arabic language (mainly Arabic grammar) for all levels from third to twelve grades and study the first year Arabic courses at the Jordanian Universities to guarantee smooth coherent transition.

II.3.b University level (JUST)

- A member of the steering committee for the Information Technology Affairs.
- A coordinator for the committee to develop a pointing evaluating system for the faculty members of the university and to review the existing system.
- A member of on line registration committee.
- Faculty of engineering representative in the university council 1993.
- Faculty of engineering representative in the university council 1995.

- A consultant for the club of opinion and counter opinion
- A consultant for the Computer Community Club.
- University classes schedule committee.
- A Consultant for the scientific Research Development Club.

II.3.c Faculty Level:

- An Invited External member in the faculty council of the college of information Technology College at Yarmouk University.
- Faculty council 1996/1997.
- College representative in the college of higher education council.
- Graduate studies committee 2004-2003.
- Scientific Research Committee.
- Coordinator for a technical committee to develop and update the college senior project policy.
- Student's affairs committee.
- Coordinator for graduate studies committee.2004-2005.
- A member of ABET accreditation committee (United Arab Emirates University, Department of College of Information Technology).

II.3.d Department Level

- A member of ABET accreditation committee (United Arab Emirates University, Department of Electrical Engineering).
- Coordinator of Graduate Studies and Scientific Research Committee.
- Laboratories Development Committee.
- Coordinator of the Appointment and Promotion Committee.

II.3.e Community Services:

- A workshop on Y2K problem for Jordan Petroleum Refinery Company.
- A workshop on Y2K problem for Jordan Civil Aviation Authority.
- A workshop on Y2K problem in the Interior Ministry.
- A program about the Internet and its social impact on the Jordanian TV, main channel.
- Participated in on line program about the research in the Arab world, Aljazeera Main channel.

- Participated in on line program about the women and research in the Arab world, Aljazeera Main Channel.

II.4 PROFESSIONAL EXPERIENCE

II.4.a Examples of Projects :

- Chairing a Task Force consists of 3 professors and 14 computer scientists and 5 managers to handle the Y2K problems in the campus of United Emirates Arab University. This included reviewing all systems used in finance department, personnel department, and health information system installed in the University Hospital, registration system and all workstations, PC and other computing devices. Two international companies have proposed to do the similar work and asked for 1.5 million UAE Dirhams. It was not easy to approve that our task force to do the job until after I made a presentation to Sheik Nahayan Bin Mubarak, Minister of Higher Education, and the minister of communication, then they approved that we do the Job not the International companies. After investigating all the systems and the application and procedures used we managed to gain success, which was beyond expectation.
- Design and write a filter using JAVA language to be placed on the server which is capable of blocking all dirty pictures and replace them from a pool of pictures. The filter can also replace any selected "dirty" word by set of selected symbols. Therefore, it is unlike a regular proxy or a firewall, its function is not just blocking undesired sites, but it can modify, clean, and reproduce the incoming html files.
- Developed an intelligent file conversion engine that is capable of recognizing a finite set of predetermined file formats and converting them into a single output format
- Design, simulate and send to fabrication and ALU that can handle 128 operations on a 40-pin package.
- Developed a fully secured package for paperless lab operations.
- Designing, implementing a system that enables Deaf people to talk over the phone. This includes using voice to Text software development tools.
- A complete circuit has been designed that enables student to register using their mobiles. This includes designing and writing all or required software to enable a mobile phone to communicate with the university database and execute an automatic SMS replay. The system maintains a file with all incoming and outgoing message as a record for authentication purposes.
- Designing and implementing a device for controlling electrical appliances includes light at homes using voice commands based on a computer based program. The system has the ability to control the device in two different ways. By clicking the command or by saying it.

This important for handicapped people as it enables them to have full control of their home's electric system without the need of the help of others.

II.4.b Educational Experience and Development:

- Invited speaker by Qater University to lecture in a Computer Interface Workshop.
- Invited Speakers by many governmental and private institutions to lecture about various issues on computer system and computer applications.
- Chair of the first international conference on Digital Communication and Computer Application, 2006.
- Co-Chair an International symposium on Advanced Computational Technology, UAEU, Abu Dhabi 25-27/3/2000.
- A member of a committee to initiate a Computer Engineering Department in Jordan University of Science and Technology.
- A member of a committee to initiate the College of information Technology at Jordan University of Science and Technology.
- Participated in the Multimedia Seminar for integrating technology into teaching, organized by the UINSCO, held in American University at Beirut, Lebanon.
- Developing a short course on the Internet Security entitled "Computer and Internet Security: Hardware, Software, Internet and Intranet Issues for Effective Enterprise Systems Development. The course is offered to the IT managers, engineers, and computer scientist in the private as well as governmental sectors.
- Developing a short course on the E-Commerce Security entitled: E-Commerce Security: Practical Cryptography for Secure Internet Applications Date. The course is being offered to the E-commerce and L-commerce professionals and managers in either technical or business fields.
- With the Collaboration of Dassault Company (France), I have developed a complete full curriculum for software Engineering Track in the Department of Electrical Engineering at United Arab University.
- Designed, established, and put to production a complete software engineering laboratory. The laboratory is composed of 11 Unix Workstations (Sun) linked by an Ethernet network. The laboratory is equipped with the following CASE (Computer Aided Software Engineering) applications: UNIX Solaris and the Development tools which include: STP (Software Through Pictures), STP/OMT/UML (STP with Object Modeling Technique and Unified Modeling Language), C, C++, and Ada coding environment, ATTOL Test Tool, LOGISCOPE Quality Metric Tool, and the INTERLEAF Document Management Tool.
- Leading a team of 4 faculty members and 4 engineers to develop a complete content for several on line courses.

- Supervising and helping 6 undergraduate students in writing articles about e-learning; all the articles got accepted in the worldwide conference “education without border 2005”, Abu Dhabi. In the even we met with two Nobel prize winner, president of Boeing, x-prime ministers of Australia and Canadian education minister, vice president of Intel and president of Indian Telecom.

II.4.c Consultation:

- Royal Jordanian Air Forces.
- Academic Company for consulting and Educating “Saudi Arabia”

III. RESEARCH

III.1 RESEARCH IMPACT AND PRODUCTIVITY.

I have published over 50 papers and book chapters. I am considered one of the founders of Divisible Load Theory (DLT) in the field of distributed systems, along with Robertazzi and Cheng. I published the fourth paper in this area. Now there are more than 5 books, hundreds of papers, and many patents in this area (<http://web.ece.sunysb.edu/~tom/dlt.html#8895>). If we were to use the h-index of Microsoft Academic Research as a gauge, I would be classified among the top 1 percent of researchers in Jordan and among the top 1 percent of researchers in the UAEU in fields of science and engineering. I am indeed proud of my research achievements, most completed during my years as an academic in the Middle East. This experience is of great value in providing leadership to others who are asked to produce excellent research while also handling a significant load in administration, teaching and service.

III.2 RESEARCH INTERESTS

- Performance evaluation of fault-tolerant parallel sensor network systems (Cluster Computing).
- Scheduling in heterogeneous distributed systems where different paradigms of task are considered in fault free, fault-tolerant and faulty environments.
- Develop an analytical model to evaluate the distributed systems. The idea behind this research stems from the fact that most of the distributed systems, either implemented like CC-NUMA by SUN and SGI or under research, lack systematic mechanisms for their performance evaluation. They mostly rely on the benchmark simulation that has many problems and it is very subjective. Although there is some work to qualitatively, address

the scalability problem, but still there is no approach to analytical solution. I strongly believe that the closed form solution is very difficult; however, it is visible to get an analytical solution in other forms.

- Develop (under the slogan “back to basics”) a new coding technique that will make use of low utilization of the computing power of the microprocessor(s) to reproduce the code rather getting it from a storage device in lengthy loop of fetching cycles. The new coding is expected to drastically minimize the computer latency by reducing the number of memory cycles.
- Cryptography and Computer security in wired and wireless networks.
- Distributed Wireless Computing.
- Ad-Hoc, Wireless and sensor networks.

III.3 FUNDED RESEARCH

- Towards E-Learning Teaching Methodology: Jordan University of Science and Technology Jordan.
- Distributed Virtual Memory System Design, Jordan University of Science and Technology Jordan.
- Performance Evaluation of Fault-Tolerant Multiprocessor and Network Systems United Arab Emirates University.
- An Optimal Load Sharing Strategy for Divisible Jobs in Fault Tolerant Cluster Computing United Arab Emirates University.
- Establish an e-learning educational, internetworking Center MEDA countries and EU.

III.4 CONFERENCE PAPERS, BOOKS and JOURNAL ARTICLES

III.4.a Refereed conference proceedings

- [1] **Bataineh**, S. and Robertazzi, T.G., “Distributed Computation for a Bus Networks with Communication Delays”, Proceedings of the 1991 Conference on Information Sciences and Systems, The Johns Hopkins University, Baltimore MD, pp.709-714.
1991
- [2] **Bataineh**, S. and Robertazzi, T.G., “Ultimate Performance Limits for Networks of Load Sharing Processors”, Proceedings of the 1992 Conference on Information Sciences and Systems, Princeton University, NJ, March
1992.

- [3] **Bataineh, S.**, "Analysis of Multihop Radio Path Communication Using Stochastic Manufacturing Network Model", Proceeding of 33rd Science Week Auditoria of Aleppo University, November, 1993.
1993.
- [4] **Bataineh, S.**, Hsiung, T and Robertazzi, T.G., "Closed Form Solutions for Bus and Tree Networks of Processors Load Sharing A Divisible Job", Proceedings of the 1993 International Conference on Parallel Processing}, St. Charles, Illinois, August. 1993.
1993.
- [5] **Bataineh, S.**, "Queuing Model to Analyze Intractable Loosely Coupled Multiprocessor systems", Proceeding of the International Conference on Computer and Information System, Aug. 1994.
1994.
- [6] **Bataineh, S.**, Al-Anbukey, A., and Al-Agtash, S., "Power Demand Prediction Using Fuzzy Logic", Proceedings of the 1994 International Conference on Robotics, Vision and Parallel Processing for Industrial Automation, May 26-28, 1994.
1994.
- [7] Al-Anbukey, A., Al-Agtash, S., and **Bataineh, S.**, "Implementation of Neural Network to Unit Commitment", ICONIP 1994 : International Conference On Neural Information Processing,
1994.
- [8] **Bataineh, S.**, and Al-Karaki, J., " Closed Form Solution for Response Time of Fault Tolerant Systems Based on Primary Site Approach " International Conference on Electronics, Circuits, and Systems, ICECS'95, pp. 47-56.
1995.
- [9] **Bataineh, S.**, and Robertazzi, T., "Stochastic Analysis of Manufacturing Network System "' International Conference on Electronics, Circuits, and Systems, ICECS'95, pp. 543-550.
1995.
- [10] Al-Ibrahim, M., **Bataineh, S.**, and Irshid, M., " A New Fast Analog-to-Digital Counting Converter," Proceeding of the Third IEEE International Conference on Electronics, Circuits, and Systems (ICECS) pp. 912-916, October 13-16,
1996.

- [11] **Bataineh**, S., "Towards Analytical Solution for the Optimum Finish Time in a Heterogeneous Distributed Systems", International symposium on Advanced Computational Technology, IS/ACT, 2000.
- [12] **Bataineh**, S., and Al-Karaki, J., " Fault-tolerant Computing on Cluster of Workstations" ACS/ IEEE International Conference on Computer Systems and Applications, AICCSA-03, 14-18 July, 2003.
- [13] **Bataineh**, S., Al-Sharaa, B., Qudan, N., "Task Allocation on Fault-Tolerant Network of Processors Using a Primary Site Approach" 3rd WSEAS Int. Conf. On Software Engineering, Parallel and Distributed Systems (SEPADS 2004) Salzburg, Austria, February, 2004.
- [14] **Bataineh**, S., Audat, A., "Task-to-Processor Assignment in Heterogeneous Network of Processors (Cluster) Systems", the International Arab Conference on Information Technology Mentouri University of Constantine, Algeria, December 12-15, 2004.
- [15] **Bataineh**, M., Arafat, A., " Load Distribution in Daisy Chain & Two-Level d-distribution Tree Network Based on Power Consumption 5rd WSEAS Int. Conference. On Software Engineering, Parallel and Distributed Systems (SEPADS 2006) Madrid, Spain, 163-168, February, 2006.
- [16] Karaki, J., and **Bataineh**, S., "On the Node Cooperation in Mobile Ad hoc Networks" 10th IEEE International Conference on Communication Systems (IEEE ICCS'06), Singapore, November, 2006,
- [17] **Bataineh**, S., and Arafat, M., " Load Distribution in Daisy Chain & Two-level d-dimensional Tree Networks Based on Power Consumption", The 1st International Conference on Digital Communications and Computer Applications", March 2007. 2007.
- [18] Abdel-hafeez, S., **Bataineh**, S., and Sawalmeh, A. "High Performance AES Design Using

-
-
- Pipelining Structure Over $GF((24)2)$ " IEEE International Conference on Signal Processing and Communication, Dubai, UAE , November, 2007.
- [19] Awos Kanan, Ahmad Dalal'ah, Sameer **Bataineh**, "TCP Performance in Ad Hoc Networks", Proceedings of International Conference for Internet Technology and Secured Transactions (ICITST 2008), June 21–23, Ireland. 2008.
- [20] Buthayna Al-Sharaa and Sameer **Bataineh**, Clustered (Hierarchical) AD HOC Routing Protocol (CARP), 2011 3rd International Conference on Computer Technology and Development (ICCTD 2011), Chengdu, China November 25-27. 2011
- [21] Issa M. Khalil, Sameer **Bataineh**, Liana Qubajah, Abdallah Khreishah, Distributed secure routing protocol for Mobile Ad-Hoc Networks, 5th International Conference Computer Science and Information Technology (CSIT), March 2013.
- [22] **Bataineh**, S., Robertazzi, T.G., Ultimate performance limits for networks of load sharing processors, CEAS Technical Report 623, State University of New York at Stony Brook.

III.4.b Books

- [23] Robertazzi, T.G., Computer Networks and Systems: Queueing Theory and Performance Evaluation, Springer-Verlag, N.Y., 1990. Second edition: 1994. Third edition: 2000. Contains sixty pages dealing with the algebraic topological structure of Markov chains of queuing and stochastic Petri networks.

III.4.c Journal papers

- [24] **Bataineh**, S. and Robertazzi, T.G., "Bus Oriented Load Sharing for a Network of Sensor Driven Processors", IEEE Transaction on System, Man and Cybernetics, Vol. 21, No. 5, Sept. 1991.
- [25] **Bataineh**, S. and Asir, B. "Efficient Scheduling Algorithm for Divisible and Indivisible tasks in Loosely Coupled Multiprocessor Systems", IEE-part C, Software Engineering Journal, pp. 13-18 January, 1994.

- [26] **Bataineh, S.**, Hsiung, T and Robertazzi, T.G., "Closed Form Solutions for Bus and Tree Networks of Processors Load Sharing A Divisible Job", IEEE Transactions on Computers, pp. 1184-1197, Vol. 43, No. 10, August, 1994
- [27] **Bataineh, S.** and Al-Ibrahim, M. "Effect of Fault Tolerance and Communication Delay on Response Time in Bus Network Multiprocessor System, " Computer Communication Journal, pp. 843-851, Vol. 17, No. 12, December, 1994.
- [28] Al-Anbuky, A., **Bataineh, S.**, and Al-Agtash, S., "Power Demand Prediction Using Fuzzy Logic," Control Engineering Practice, A Journal of IFAC, Vol. 3, No. 9, pp. 1291-1298, 1995.
- [29] **Bataineh, S.**, "An Expert Computer-Based System for Managing Complex-Decision Making Systems, " The Journal of Computer Information Systems, Vol. XXXVI, No. 2, Winter 1995-1996.
- [30] Al-Ibrahim, M., **Bataineh, S.**, and Irshid, M., "A New Fast Analogue-to-Digital Counting Converter," Journal of Mathematics and Computer Sciences (Computer Science Series), Vol. 7, No. 2, pp. 87-94, 1996.
- [31] **Bataineh, S.**, Al-Anbuky, A., and Al-Agtash, S., "An Expert System for Unit Commitment and Power Demand Prediction Using Fuzzy Logic and Neural Network," Expert System: Vol. 13, No. 1, pp 29-40, February, 1996.
- [32] **Bataineh, S.** and Robertazzi, T., "A Discrete Time Petri Type Network for Modeling Synchronization and Serialization", Cybernetica, Vol. XXXIX, N 4, 1996.
- [33] Jumaily, O. and **Bataineh, S.** "An Optimal Single Error Locating TSC-TMR System", International Journal of Electronics, Vol. 82, No. 6, pp. 629-639, 1997.
- [34] **Bataineh, S.** and Robertazzi, T.G., "Performance Limits for Processor Networks with

-
-
- Divisible Jobs" IEEE Transactions on Aerospace and Electronic Systems, Vol 33, Issue 4, pp. 1189-1198, October, 1997.
- [35] **Bataineh**, S. and Al-Ibrahim, M. "Load Management and Flow Control in Loosely Couple Multiprocessor Systems", Dynamics and Control, 8, 107-116, 1998.
- [36] **Bataineh**, S., and Al-Saideen, A., " A heuristic Algorithm for Scheduling Multiclasses of Tasks in Multiprocessor Systems", International Journal of Computers and Applications, Vol. 20, No. 3, 107-116. 1998.
- [37] **Bataineh**, S., Odet-Allah, A., and Al-Omari, R., "Reliability of Mesh and Torus Topologies in the Presence of Fault", Journal of Telecommunication Systems, 10, pp. 389-408, 1998.
- [38] Al-Ibrahim, M. and **Bataineh**, S., "High Resolution and Low Distortion Digital Look-up-Table Sinusoidal Oscillator," International Journal of Electronics, Vol. 87, No. 1, pp. 33-41, 2000.
- [39] Al-Ibrahim, M., **Bataineh**, S. and Al-Khateep, A. M, "Digital sinusoidal oscillators with high frequency resolution and low harmonic distortion", International Journal of Electronics, Vol. 87 No. 10, pp. 1209-1218, October, 2000.
- [40] **Bataineh**, S., and Al-Karaki, J., " Response Time Analysis of Repairable Multiprocessor Systems" the International Journal of Computer Systems Science and Engineering, Vol. 15, No. 4, pp 201-211, July, 2000.
- [41] **Bataineh**, S., and Khaleel, I., "Performance Analysis of Asynchronous Multibuffered Banyan Network with Variable Packet Length", International Journal of Parallel and Distributed Systems and Networks, Vol. 3, No. 4, 2000.
- [42] **Bataineh**, S., and Allos, B., "A Fault-Tolerant Multistage Interconnection Network," Telecommunication System Journal, Vol. 17, No. 4, pp.455-574, 2001.

- [43] **Bataineh**, S., and Younis, A." An Optimal Manhattan Street Network Routing Algorithm (OMRA)", International Journal of Computers and Applications, Vol. 25, No. 2, 2003.
- [44] **Bataineh**, S. and Qanzu'a, "Reliable Omega Interconnected Network for Large Scale Multiprocessor Systems", The Computer Journal, Vol. 46, No. 5, 2003.
- [45] **Bataineh**, S., Al-Sharaa, B., Qudan, N., "Task Allocation on Fault-Tolerant Network of Processors Using a Primary Site Approach 3rd WSEAS Transactions on Computer, Vol. 3, No. 4, pp. 909-916.October, 2004.
- [46] **Bataineh**, S. and Al-Karaki, J., "Closed Form Solution for Response Time of Fault Tolerant Network of Processors", Electrical and Computer Engineering Journal, Vol. 30, pp. 291-308, 2004.
- [47] **Bataineh**, S., "Towards Analytical Solution to Task Allocation, Processor Assignment, and Performance Evaluation of Network of Processors", Journal of Parallel and Distributed Computing (JPDC), Vol. 65, pp. 29-47, 2005.
- [48] **Bataineh**, S., "Divisible Load Distribution in a Network of Processors", Journal of Interconnection Networks (JOIN), Vol. 9, pp. 31-51, 2008.
- [49] Ghada A. Al-Mashaqbeh, Jamal N. Al-Karaki, Sameer M. **Bataineh**, "CLEAR: A Cross-Layer Enhanced and Adaptive Routing Framework for Wireless Mesh Networks" Wireless Personal Communications, Vol 51, Number 3, 449-482. DOI: 10.1007/s11277-009-9758-4, July 06, 2009.
- [50] Ahmad Dalal'ah, Samir **Bataineh** and Awos O. Kan'an "Improving TCP Performance over Mobile Ad Hoc Networks", International Journal of Internet Technology and Secured Transactions, Volume 2, Numbers 1-2, pp. 137-159(23), 5 February, 2010.
- [51] Sameer **Bataineh**, Issa M. Khalil, Abdallah Khreishah, Justin Y. Shi, "Performance

-
-
- Evaluation of Matrix Multiplication on a Network of Work Stations with Communication Delay", Journal of Communications and Information Sciences(JCIS), Volume1. Number 2, October, 2011.
- [52] Haya Sammaneh, Jamal N. Al-Karaki, Sameer **Bataineh**, " An end-to-end support for short-lived TCP flows in heterogeneous wired-cum-wireless networks: An analytical study", International Arab Journal of Information Technology 8(2):212-220 · April, 2011.
- [53] Ismail Hababeh, Issa Khalil, Abdallah Khreishah, Samir **Bataineh**, "Performance evaluation of wormhole security approaches for ad-hoc networks", Journal of Computer Science, 09 (12) 2013.
- [54] Manar Araft, Sameer **Bataineh**, Issa M. Khalil, "Probabilistic Approach to Scheduling Divisible Load on Network of Processors", International Journal of Sensor Networks and Data Communications 04(02) · September, 2015.
- [55] Sameer **Bataineh** and Suheer Bani Irshaid, "The impact of Time Varying System Parameters on Finish Time for Divisible Loads in Distributed Systems", International Conference on Engineering and Technology, Computer, Basic and Applied Science, Dubai, UAE, 2016

III.5 FUNDED RESEARCH

- Towards E-Learning Teaching Methodology: Jordan University of Science and Technology Jordan.
- Distributed Virtual Memory System Design, Jordan University of Science and Technology Jordan.
- Performance Evaluation of Fault-Tolerant Multiprocessor and Network Systems
United Arab Emirates University.
- An Optimal Load Sharing Strategy for Divisible Jobs in Fault Tolerant Cluster Computing
United Arab Emirates University.
- Establish an e-learning educational, internetworking Center MEDA countries and EU.

IV. TEACHING, MENTORING, AND ADVISING

IV.1.a Graduate Courses

- Advanced Computer Networks
- Managing Data Communications and Networks
- Computer Information System Security
- Network Security and Perimeter Protection
- Current Topics in Management Information Systems
- Cryptography
- Fault-Tolerant Parallel Systems
- Advanced Computer Architecture
- Computer and Internet Security

IV.1.b Undergraduate Courses

- Microprocessors
- Microprocessor-Based Systems
- Peripheral Devices
- Computer Networks
- Data Communications
- Network Security and management.
- Digital Logic Design
- Computer Organization and Design
- Computer Architecture
- Software Engineering
- Database systems
- Data structure
- Operating systems

IV.2 ADVISING: GRADUATE STUDIES

a. Supervised the following master thesis at the Department of Electrical and Computer Engineering at Jordan University of Science and Technology:

- Multistage Interconnection Networks for Large Multiprocessor Systems
- Response Time Analysis of Fault Tolerant Multiprocessor Systems Using Queuing Theory.

- Scheduling a Set of Indivisible Tasks and Multi-classes of Divisible Tasks Processor Systems with Minimum Finish Time.
- Performance Analysis of Asynchronous Multi-Buffered Banyan Network with variable Packet Length.
- Adaptive Fuzzy System Control.
- Implementation of Fuzzy/ Neural Networks on Unit Commitment and Prediction of Power Demand.
- Computerized Hybrid Solution to the Uniform Suction Effects on Magneto hydrodynamic Electrically Conducting Fluid over Rotating Disk.
- Energy Saving for Ad-Hoc Networking.
- Distributing and Executing Divisible Job on Ad-Hoc Network.
- Secure Routing Protocol for Ad-Hoc Network.
- Adaptive Load Balancing Algorithm in Network of Work Stations.
- Hierarchical Ad-Hoc Network Routing Protocol.
- A Cross-Layer Based QoS Routing Framework for Wireless Mesh Network.
- Analytical Solution for Deadline Based Scheduling for Divisible-Load in Heterogenous Distributed Systems
- Parallel probing network of processors with unknown parameters for optimizing divisible load scheduling.
- The Impact of Time-Varying System Parameters on Finish Time for Divisible Loads in Distributed Systems

b. Member board of several master thesis committees (over 50).

V. EDITORSHIP AND REFEREEING ACTIVITIES:

1. Member of editorial board of Jordanian Journal of Computers and Information Technology
2. Referee for:
 - IEEE Transaction Computer Engineering
 - IEE Proc.-Computer. Digital. Tech.
 - IEE Proc-Communication.
 - International Journal of Electronics
 - Journal of Parallel and Distributed Computing
 - The Computer Journal (British Computer Society)
 - Journal of Computer and Electrical Engineering
 - International Journal of Simulation and Modeling
 - Mu'ta University Journal
 - Yarmouk University Journal
 - Jerash University Journal
 - Al-Najah National University Journal
3. Referee for several regional and international conferences.

VI. MULTI-DISCIPLINARY ACTIVITIES:

- A lecture on "The Mystery of Love"
- A lecture on "Skills of Creative Thinking"
- Workshop on "Time Management"
- Workshop on "NLP Neural Language Programming"