Al al-Bayt University

Prof. Saad Bani-Mohammad
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PERSONAL DATA

Place of Birth	:	Kuferkhall, Jarash, Jordan.
Nationality	:	Jordanian.
Gender	:	Male.
Martial Status	:	Married with four children (Yamen, Salma, Bana, and Rayyan).

EDUCATION

- Ph.D in Computer Science (Parallel Computing), Department of Computing Science, University of Glasgow, Glasgow, U.K, 2005-2008.
  - Ph.D. Dissertation: "Efficient Processor Allocation Strategies for Mesh-Connected Multicomputers"
- MSc in Computer Science (Parallel Computing), Department of Computer Science, Al al-Bayt University, Jordan, 2000-2002, Rank 1/8.
  - M.Sc. Dissertation: "Non-Contiguous Processor Allocation for 3D Mesh Multicomputers"
- BSc in Computer Science, Department of Computer Science, Yarmouk University, Jordan, 1990-1994.
- General Secondary School Certificate, Ministry of Education, Jordan, 1989-1990.

AWARD RECEIVED

- The Crown Prince Award for Best Government Service Application, 25th February, 2020.

- Reviewer Recognition Award, in recognition of the review made for Journal of Computer Science, 24 December, 2020.
- Reviewer Recognition Award, in recognition of the review made for International Journal of Communication Systems, 16 July, 2019.
- Reviewer Recognition Award, in recognition of the review made for International Journal of Communication Systems, 6 March, 2018.
- Best Paper Award in the IEEE International Conference on Engineering & MIS (The IEEE ICEMIS 2017), 8-10 May 2017.
- Elsevier Reviewer Recognition Award, In recognition of the review made for Future Generation Computer Systems Journal (FGCS), May, 2016
- His Royal Highness Prince Hamzah bin Al-Hussein's Award for the Top Rank student on the batch of the MSc students on 2002.
- Al al-Bayt University's Scholarship for the PhD study at University of Glasgow, U.K.

RESEARCH INTEREST

- Parallel Computing.
- Processor Allocation and Job Scheduling in Mesh-Connected Multicomputers.
- Cloud Computing.
- Interconnection Networks.
- Mobile Ad-Hoc Networks .
- Performance Modelling and Simulation.

RECENT PROFESSIONAL EXPERIENCE

1. **Al al-Bayt University, Jordan, 2014-2/9/2020:**
   - Dean, Prince Hussein Bin Abdullah College for Information Technology.
2. **Al al-Bayt University, Jordan, 2013-2014:**
   - Vice Dean, Prince Hussein Bin Abdullah College for Information Technology.
3. **Al al-Bayt University, Jordan, 2008-2013:**
   - Head of Computer Science Department, Prince Hussein Bin Abdullah College for Information Technology.
4. **Al al-Bayt University, Jordan, 2009-2010:**
   - Dean's Assistant, Prince Hussein Bin Abdullah College for Information Technology.
5. **University of Glasgow, United Kingdom, 2006-2008:**
   - Tutor in the Department of Computing Science, University of Glasgow.
6. **Al al-Bayt University, Jordan, 2002-2005:**
   - Lecturer in the Department of Computer Science, Prince Hussein Bin

Abdullah College for Information Technology.

7. **Al al-Bayt University, Jordan, 1994-2002:**
   - Computer Labs Supervisor, Department of Computer Science.
   - Teacher in the Computer Laboratories in the Department of Computer Science.
   - Participating in the establishment of Research and Training laboratories of the Computer Science Department.
   - Carrying out the responsibility of training the employees on campus periodically.

MASTER THESIS SUPERVISED

1. Husam Mashagbah, **Multi-objective Task Scheduling Optimization in Cloud Computing**, 2020.

2. Abeer Shudeefat, **An Efficient Processor Allocation Algorithm for 2D Mesh-Connected Multicomputers**, 2018.

3. Areen Alabass, **Comparative evaluation of contiguous and non-contiguous processor allocation strategies based on common communication patterns on 2D mesh Multicomputers**, 2018.

4. Nabeel Abu Olaim, **Non-contiguous Processor Allocation Algorithm that Maintains a High Degree of Contiguity among Allocated Processors in 2D Mesh-Connected Multicomputers**, 2017.

5. Dheif Allah Alsardia, **A new Non-contiguous Allocation Strategy for 2D Mesh Multicomputers with Reduced Communication Overhead**, 2016.

6. Ahmad Dar Assi, **Enhancing the Non-Contiguous Allocation Strategies by using Higher Dimensional Topologies**, 2016.

7. Gader Ayed Al-khawaldeh, **System Lifetime-Aware Routing Protocol for Mobile As-Hoc Networks**, 2016.

8. Israa Muhammad Jaradat, **On Load Balancing in Partitioned Cloud Computing Systems Using Migration**, 2016.

9. Ibrahim Alrawahna, **A Spiral Non-Contiguous Processor Allocation Algorithm for 2D Mesh-Connected Multicomputers**, 2015.

10. Raed alharafesha, **Irregular Shape Strategy for Non-contiguous Sub-mesh Allocation in 2D Mesh-Connected Multicomputers**, 2015.

11. Batool Zyoud, **The Effect of the Heavy-Tailed Distribution on the Performance of Non-Contiguous Processor Allocation and Job Scheduling Strategies for 2D Mesh-Connected Multicomputers**, 2014.

12. Ahmad Al-Sabhany, **The Performance of Non-contiguous Allocation for Common Communication Patterns in 3D Torus Mesh Multicomputers**, 2014.

13. Doreyed Mohammed, **The Effect of Real Workload Traces on the Performance of Contiguous and Non-Contiguous Allocation Algorithms for 3D Torus Multicomputers**, 2014.

14. Amer Mohaisen, **Job Migration for 2D Mesh Multicomputers using Dynamic Compaction**, 2014.

15. Motasem Smadi, **Contiguous Submesh Allocation for 3D Mesh Multicomputers using Free List Approach**, 2011.

16. Mohammad Yassein, **A Compacting Non-Contiguous Processor Allocation Strategy for 2D Mesh-Connected Multicomputers**, 2011.

17. Bassam Subaih, **Achieving Self Healing in Service Specific Overlay Networks**, 2011.

18. Mazen Hamdan, **Comparative Performance Evaluation of Noncontiguous Allocation Algorithms in 2D Mesh-Connected Multicomputers**, 2010.

19. Mohammad Hamed, **Evaluation of Common Scheduling and Contiguous Allocation Strategies for Different Parallel Job Request Shapes**, 2010.

ACADEMIC SERVICES AND ACTIVITIES

1. Chairman of the committee formed to integrate the ideas contained in the plan of the Ministry of Higher Education and Scientific Research to integrate e-learning into the higher education system within the executive plan of Al al-Bayt University to integrate e-learning into its academic programs, 2021.
2. Chairperson of accreditation committee for Information Technology programs in the Amman Arab University, 2021.
3. Chairperson of accreditation committee for Information Technology programs in the Applied Science Private University, 2020.
4. Member of Quality Assurance and Development Center council, Al al-Bayt University, 2020/2021.
5. Member of primary disciplinary council for faculty members, Al al-Bayt University, 2020/2021.
6. Member of the university strategic plan for years 2020-2022.
7. Chairperson of the committee formed to prepare the three-year executive plan (2020-2022) for Al al-Bayt University to integrate e-learning into its academic programs, that is consistent with e-learning policies and the future of higher education in Jordan (reality, ambition, challenges).
8. Member of the committee for evaluating online exams, Ministry of Higher Education and Scientific Research, 1st June, 2020.
9. Member of the e-learning committee, Al al-Bayt University, (23rd March, 2020-now).

10. Member of the online technical team, Al al-Bayt University, (4th May, 2020-now).
11. Chairperson of accreditation committee for Information Technology programs in the Jadra University, 2018.
12. Chairperson of the committee formed to prepare the risk management plan for the strategic plan of Al al-Bayt University.
13. Executive Committee member, Association of Arab Universities Colleges of Computing and Information Society, 2017-2019.
14. Digital Education Committee Chair at Talal Abu-Ghazaleh Knowledge Forum.
15. Member of the Selection Committee for the HOPES Scholarships for the Master and Bachelor Programs presented by European Union to Syrian and Jordanian Students, 2018/2019.
16. Member of the Committee of the university competence exam for the specialization of computer science and computer technology at the level of the Hashemite Kingdom of Jordan.
17. Member of the General Committee of the International Arab Conference of Information Technology.
18. Member of the General Committee of the College of Computers and Information Society.
19. Senior Member of the IEEE.
20. Senior Member of the IEEE Computer Society.
21. Member of the Deans' Council, Al al-Bayt University, (2014-2020).
22. Member of the Consultation, Technical and Community Service Center Council, Al al-Bayt University, (2017-now).
23. Member of Graduate Studies Council, Al al-Bayt University, (2015-2020).
24. Member of the Scientific Research Council, Al al-Bayt University, (2014-2015, 2018-now).
25. Member of the Computer Center Board, Al al-Bayt University, (2014-2020).
26. Member of the Students' Issues Committee.
27. Member of the Curriculum Committee, Al al-Bayt University, (2014-2020).
28. Head of the Graduate Studies Committee, IT College, (2014-2020).
29. Member of the University Council, Al al-Bayt University, (2010-2011, 2014-2020).
30. Head of the Scientific Research Committee, IT College, (2013-2014).
31. Member of the Graduate Studies Committee, Computer Science Department, (2013-2014).
32. Head of the Graduate Studies Committee, Computer Science Department, (2008-2013).

33. Member of the Graduate Studies Committee, IT College, (2008-2013).
34. Member of the Scientific Research Committee, IT College, (2008-2013).
35. Member of the Graduate Studies Council, Al al-Bayt University, (2008-2010, 2013-2014).
36. Head of the Curriculum Committee, Computer science Department, (2008-2013).
37. Graduate Program Committee Coordinator.
38. Student's Advising Committee for the CS Department.

CURRICULUM AND COURSE DEVELOPMENT

1. Establishing the Undergraduate Program in Systems and Information Security.
2. Curriculum Development for the Systems and Information Security undergraduate program.
3. Curriculum Development for the Computer Science Department.
4. Designed the "Programming in Python" course and its lab.
5. Designed the "PHP Programming" course and its lab.
6. Redesigned the "Fundamentals of Distribute and Parallel Systems" course.

MAJOR FUNDED PROJECTS

Have played a major/leading role on behalf of Al al-Bayt University for the following major projects:

1. **Partnership for Digital Learning and Increased Access (PADILEIA):** I played a key role in the preparation of this project, and I am currently the contact member of the project management team. PADILEIA brings together diverse partners. Led by King's College London, the partnership includes university partners Al-al Bayt University (Jordan) and American University of Beirut (Lebanon). Kiron Open Higher Education (Germany) and MOOC platform provider FutureLearn (UK) support digital and online learning. This project is the first to be supported by **Strategic Partnerships for Higher Education Innovation and Reform (SPHEIR)**, a new initiative funded by the **Department for International Development (DFID)** and managed by the British Council, Universities UK and PwC, 15th May 2017 – 31st December 2021.
2. **CHAMS Project:** Have been a member of the AABU team (Dr. Raghda Faouri, Prof. Ismail Ababneh and **Prof. Saad Bani-Mohammad**) for this bi-national (France and Jordan) project for training Syrian refugees and underprivileged host community youngsters. The project starting date is June 2018.

3. **Enhancing Capacity Building:** Played a key role in this project, which is joint between Al al-Bayt University and UNHCR. It had for goal enhancing digital learning teaching skills.

4. **Saudi Grant Project:** Prepared this 1.8-million JDs project funded by the Saudi Grant (2014-2016). The project includes: 1) a 2000-square meters extension to the IT College, and 2) the provision of labs, wireless networking, teaching devices and office equipment.

5. **Peace-by-HPC (INCO-DC Project 950895):** This was an EC-funded high performance computing project with partners from Parsytec (Germany), NTUA (Greece), Al al-Bayt University (Jordan), ECTRA(Egypt), and ERI (Egypt). Al al-Bayt's funded share: 77,500 ECUs.

PUBLICATIONS:

- **REFEREED JOURNALS AND CONFERENCES**

1. Areen Abbas, Saad Bani-Mohammad and Ismail Ababneh, **Performance Evaluation of Contiguous and Noncontiguous Processor Allocation based on Common Communication Patterns for 2D Mesh Interconnection Networks**, Accepted to appear in International Journal of Cloud Applications and Computing, Volume 12, Issue 3, Article 5, 2022.

2. Saad Bani-Mohammad and Ismail Ababneh, **Improving system performance in non-contiguous processor allocation for mesh interconnection networks**, Journal of Simulation Modelling Practice and Theory, Elsevier, Volume 80, pp. 19-31, January 2018.

3. Saad Bani-Mohammad, **An Efficient All Shapes Busy List Processor Allocation Algorithm for 3D Mesh Multicomputers** , International Journal of Cloud Applications and Computing, Volume 7, Issue 2, pp. 10-26, 2017.

4. Saad Bani-Mohammad, **All Request Shapes Non-Contiguous Submesh Allocation Strategy for 2D Mesh Multicomputers**, IEEE International Conference on Engineering & MIS (The IEEE ICEMIS 2017), May 8-10, 2017, Monastir, Tunisia (Best Paper Award).

5. Saad Bani-Mohammad, **All Shapes Busy List Contiguous Allocation Strategy for 3D Mesh Multicomputers**, The IEEE International Conference on Engineering & MIS (The IEEE ICEMIS 2016), Sept 22-24, 2016, Agadir, Morocco.

6. Saad Bani-Mohammad, **The Effect of Real Workloads and Synthetic Workloads on the Performance of Job Scheduling for Non-contiguous Allocation in 2D Mesh Multicomputers**, International Journal of Distributed Systems and

Technologies (IJDST), Volume 6, Issue 1, January 2015, pp. 53-68.

7. Saad Bani-Mohammad, Ismail Ababneh, and Mohammad Yassen, **A New Compacting Non-Contiguous Processor Allocation Algorithm for 2D Mesh Multicomputers**, Journal of Information Technology Research, Volume 8. Issue 4, pp. 57-75, 2015.

8. Ismail Ababneh, Saad Bani-Mohammad, and Motasem Al Smadi, **Corner-Boundary Processor Allocation for 3D Mesh-connected Multicomputers**, International Journal of Cloud Applications and Computing, Volume 5, Issue 1, pp. 1-13, 2015.

9. Saad Bani-Mohammad and Ismail Ababneh, **On the Performance of Non-contiguous Allocation for Common Communication Patterns in 2D Mesh-connected Multicomputers**, Journal of Simulation Modelling Practice and Theory, Elsevier, Volume 32, pp. 155-165, March 2013.

10. Saad Bani-Mohammad, Ismail Ababneh, and Mohammad Yassen, **Non-Contiguous Processor Allocation in the Mesh-Connected Multicomputers using Compaction**, IEEE 2012 International Conference on Computer Systems and Industrial Informatics (ICCSII-12) that will be held in UAE during December 18-20, 2012.

11. Ibrahim Al-oqily, Bassam Subaih, Saad Bani-Mohammad, Jawdat Jamil Alshaer, Mohammed Refai, **Autonomic Healing for Service Specific Overlay Networks**, International Journal of Information Technology and Web Engineering, Volume 7, Issue 2, pp. 46-59, 2012

12. Ismail Ababneh, Saad Bani-Mohammad, Wail Mardini, Hilal Alawneh, and Mohammad Hamed, **The Effect of Communication on the Performance of Allocation Request Shape Changes in 2D Mesh-connected Multicomputers**, International Journal of Parallel, Emergent and Distributed Systems (IJPEDS), Taylor & Francis, Vol. 27, No. 5, October 2012, pp. 409-433.

13. Ibrahim Al-oqily, Saad Bani-Mohammad, Bassam Subaih, and Jawdat Jamil Alshaer, **A survey for self-healing architectures and algorithms**, the 9th IEEE International Multi-Conference on Systems, Signals, and Devices (SSD), 20-23 March 2012, Chemnitz, Germany, pp. 1-5.

14. Saad Bani-Mohammad, **On the Performance of Job Scheduling for Noncontiguous Allocation in 2D Mesh-connected Multicomputers**, the 16th IEEE Mediterranean Electrotechnical Conference (MELECON 2012), 25 – 28 March, 2012, Medina Yasmine Hammamet Tunisia, pp. 92-96.

15. Saad Bani-Mohammad, Ismail Ababneh, and Mazen Hamdan, **Performance Evaluation of Noncontiguous Allocation Algorithms for 2D Mesh Interconnection Networks**, Journal of Systems and Software, Elsevier, Volume 84,

Issue 12, December 2011, pp. 2156-2170.

16. Saad Bani-Mohammad and Ismail Ababneh, **The Effect of Job Scheduling on the Performance of Non-contiguous Allocation in 2D Mesh-connected Multicomputers**, the 11th IEEE International Conference on Scalable Computing and Communications (ScalCom 2011), 31 August - 02 September, 2011, Pafos Cyprus.

17. Ismail Ababneh and Saad Bani-Mohammad, **A New Window-Based Job Scheduling Scheme for 2D Mesh Multicomputers**, Journal of Simulation Modelling Practice and Theory, Volume 19, Issue 1, January 2011, pp. 482-493.

18. Ismail Ababneh, Wail Mardini, Saad Bani-Mohammad, Helal Alawneh, and Mohammad Hamed, **Effects of Allocation Request Shape Changes on Performance in 2D Mesh-Connected Multicomputers**, The 10th IEEE International Conference on Computer and Information Technology (CIT 2010), 29 June – 1 July, 2010, Bradford, UK.

19. Saad Bani-Mohammad, I. Ababneh, and Mazen Hamdan, **Comparative Performance Evaluation of Non-Contiguous Allocation Algorithms in 2D Mesh-Connected Multicomputers**, The 10th IEEE International Conference on Scalable Computing and Communications (ScalCom 2010) 29 June – 1 July, 2010, Bradford, UK.

20. Saad Bani-Mohammad, I. Ababneh, and M. Ould-Khoaua, **A Comparative Study of Real Workload Traces and Synthetic Workload Models for Non-Contiguous Allocation in 2D Meshes**, The 9th IEEE International Conference on Scalable Computing and Communications (ScalCom09) Sept. 25-27, 2009, Dalian, China.

21. I. Ababneh, S. Bani-Mohammad and M. Ould-Khaoua, **An Adaptive Job Scheduling Scheme for 2D Mesh Multicomputers**, Journal of Supercomputing, Volume 53, Number 1 / July, 2010, pp. 5-25.

22. I. Ababneh, S. Bani-Mohammad and M. Ould-Khaoua, **All Shapes Contiguous Submesh Allocation for 2D Mesh Multicomputers**, International Journal of Parallel, Emergent and Distributed Systems (IJPEDS), Taylor & Francis, Vol. 25, No. 5, October 2010, pp. 411-421.

23. Saad Bani-Mohammad, **The Effect of Heavy-Tailed Distribution on the Performance of Non-Contiguous Allocation Strategies in 2D Mesh Connected Multicomputers**, The 23rd IEEE/ACM International Parallel and Distributed Processing Symposium (IPDPS 2009), 2009, Rome, Italy, May 25-29.

24. Saad Bani-Mohammad, I. Ababneh, and M. Ould-Khoaua, **A Performance Comparison of the Non-Contiguous Allocation Strategies in 2D Mesh Connected Multicomputers**, International Conference on Communication,

Computer and Power, Sultan Qaboos University , Muscat, Sultanate of Oman, February 15-18, 2009.

25. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh, and Lewis M. Mackenzie, **Comparative Evaluation of Contiguous Allocation Strategies on 3D Mesh Multicomputers**, Journal of Systems and Software, Elsevier, vol. 82, no. 2, pp. 307-318, 2009.

26. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh, Lewis M. Mackhenzie and J. D. Ferguson, **The Effect of Real Workloads and Stochastic Workloads on the Performance of Allocation and Scheduling Algorithms in 2D Mesh Multicomputers**, The 22nd IEEE/ACM International Parallel and Distributed Processing Symposium (IPDPS 2008), April 14-18, 2008, Hyatt Regency Hotel, Miami, Florida USA.

27. S. Bani-Mohammad, M. Ould-Khaoua and I. Ababneh, **Greedy-Available Non-contiguous Processor Allocation Strategy and Job Scheduling for 2D Mesh Connected Multicomputers**, International Journal of Computers and their Applications (IJCA), Vol. 15, No. 4, pp. 283-296, 2008.

28. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **Comparative Evaluation of the Non-Contiguous Processor Allocation Strategies based on a Real Workload and a Stochastic Workload on Multicomputers**, Third International Workshop on Scheduling and Resource Management for Parallel and Distributed Systems(SRMPDS '07) To be held in conjunction with The 13th International Conference on Parallel and Distributed Systems (ICPADS'07) - Volume 2 , pp. 1-7, IEEE, Hsinchu, Taiwan, December 5-7, 2007.

29. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **A Performance Comparison of the Contiguous Allocation Strategies in 3D Mesh Connected Multicomputers** , The Fifth International Symposium on Parallel and Distributed Processing and Applications (ISPA 2007), Wednesday, August 29 -- Friday, August 31, Niagara Falls, ON, CANADA, LNCS 4742, pp. 645-656, 2007, Springer-Verlag Berlin Heidelberg 2007.

30. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **An Efficient Processor Allocation Strategy that Maintains a High Degree of Contiguity among Processors in 2D Mesh Connected Multicomputers** , 2007 ACS/IEEE International Conference on Computer Systems and Applications, (AICCSA 2007), Amman, Jordan, IEEE Computer Society Press, pp. 934-941, May 13-16, 2007.

31. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **A Fast and Efficient Processor Allocation Strategy which Combines a Contiguous and Non-contiguous Processor Allocation Algorithms** , Technical Report; TR-2007-229, DCS Technical Report Series, Department of Computing Science, University of Glasgow, January 2007.

32. S. Bani-Mohammad, M. Ould-Khaoua and I. Ababneh, **An Efficient Non-Contiguous Processor Allocation Strategy for 2D Mesh Connected Multicomputers**, Journal of Information Sciences - Elsevier (INS), Elsevier, Vol. 177, No. 14, pp. 2867-2883, 15 July 2007.

33. S. Bani-Mohammad, M. Ould-Khaoua and I. Ababneh, **A New Processor Allocation Strategy with a High Degree of Contiguity in Mesh-Connected Multicomputers.**, Journal of Simulation Modelling, Practice & Theory (SIMPRA), Elsevier Science, Vol. 15, No. 4, pp. 465-480, April 2007.

34. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **Processor Allocation and Job Scheduling on 3D Mesh Interconnection Networks**, International Journal of Computers and Applications, (ACTA), Vol. 29, No. 3, Canada, ACTA Press, 2007.

35. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **A Fast and Efficient Strategy for Sub-mesh Allocation with Minimal Allocation Overhead in 3D Mesh Connected Multicomputers**, Ubiquitous Computing and Communication Journal (UBICC), Vol.1, No. 1, 2006.

36. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **Non-contiguous Processor Allocation Strategy for 2D Mesh Connected Multicomputers based on Sub-meshes Available for Allocation**, Proc. 12th International Conference on Parallel and Distributed Systems (ICPADS'06) - Volume 2 , pp. 41-48, 12-15 July 2006, IEEE Computer Society Press, USA.

37. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **Greedy-Available Non-contiguous Processor Allocation Strategy and Job Scheduling for 2D Mesh Connected Multicomputers**, Proc. 11th International CSI Computer Conference, CSICC 2006, January 24-26, 2006, pp. 122-130, School of Computer Science, IPM, Tehran, Iran. This paper has been selected for the special issue in International Journal of Computers and their Applications, ISCA Press.

38. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **An Efficient Turning Busy List Sub-mesh Allocation Strategy for 3D Mesh Connected Multicomputers**, Proceedings of the 7th Annual PostGraduate Symposium on the Convergence of Telecommunications, Networking & Broadcasting, (PGNET 2006), Liverpool John Moores University, UK, 26-27 June 2006.

39. Bani-Mohammad S., Ould-Khaoua M.,and Ababneh I., **Performance Evaluation of Processor Allocation Strategies in the 2-Dimensional Mesh Network** , N. Thomas (editor), Proceedings of 21st UK Performance Engineering Workshop (UKPEW 2005), School of Computing Science, Technical Report Series, CS-TR-916, University of Newcastle, UK, 14-15 July 2005. ISSN 1368-1060. pp. 177-188.

40. Bani-Mohammad S., Ould-Khaoua M.,and Ababneh I., **A Simulation Study of**

Allocation Strategies on the Mesh Interconnection Networks, Proceedings of the 6th Annual PostGraduate Symposium on the Convergence of Telecommunications, Networking & Broadcasting, (PGNET 2005), Liverpool John Moores University, UK, 27-28 June 2005, ISBN 1-902-56011-6, pp. 197-202.

41. Bani-Mohammad S., Ould-Khaoua M.,and Ababneh I., **Performance Analysis of Processor Allocation Strategies on 2D-Mesh Interconnection Networks** , Technical Report; TR-2005-202, DCS Technical Report Series, Department of Computing Science, University of Glasgow, June 2005.

42. Bani-Mohammad S., Ould-Khaoua M.,and Ababneh I., **A Simulation Study of Allocation Strategies on the Mesh Interconnection Networks**, Technical Report; TR-2005-194, DCS Technical Report Series, Department of Computing Science, University of Glasgow, April 2005.

43. Ababneh I. and Bani-Mohammad S., **Non contiguous processor allocation for three-dimensional mesh multicomputers**, AMSE Advances in modeling and Analysis Journal (AMSE), Vol. 8, No. 2, pp. 51-63, 2003.

• BOOKS

1. Saad Bani-Mohammad, **Efficient Processor Allocation Strategies for Mesh Multicomputers**, VDM Verlag Dr. Müller Aktiengesellschaft & Co. KG, Dudweiler Landstr. 99, 66123 SaarbrÜcken, Germany, 2009, available on amazon.com ($110.00).

• BOOKS' CHAPTERS

1. Saad Bani-Mohammad, Ismail Ababneh and Motasem Al Smadi, **Submesh Allocation in 3D Mesh Multicomputers Using Free Lists: A Corner-Boundary Approach with Complete Recognition Capability**, Advanced Research on Cloud Computing Design and Applications, DOI: 10.4018/978-1-4666-8676-2. Ch012. This book is published in the IGI Global book series Advances in Systems Analysis, Software Engineering, and High Performance Computing (ASASEHPC) (ISSN: 2327-3453; eISSN: 2327-3461), p. 17, 2015.

2. S. Bani-Mohammad, M. Ould-Khaoua, I. Ababneh and Lewis M. Mackhenzie, **A Performance Comparison of the Contiguous Allocation Strategies in 3D Mesh Connected Multicomputers**, Parallel and Distributed Processing and Applications, 5th International Symposium, ISPA 2007, Niagara Falls, Canada, August 2007, Proceedings (Lecture Notes in Computer Science and General Issues). Editor: Ivan Stojmenovic, Ruppa K. Thulasiram, Laurence T. Yang, Weijia Jia, Minyi Guo, Rodrigo Fernandes de Mello, Springer, LNCS 4742, p. 645, 2007, available on amazon.com ($149.00).

AFFILIATIONS

- Senior Member, IEEE.
- Senior Member, IEEE Computer Society [IEEE-CS].
- Member, ISCA - International Society for Computers and Their Applications [ISCA].
- Member of the Embedded, Networked and Distributed Systems research groups [ENDS].
- Jordan Section IEEE Member.
- Member of Asian Council of Science Editors (ACSE).

JOURNAL REVIEWER

- International Journal of Communication Systems (IJCS).
- International Journal of Web Information Systems (IJWIS).
- Journal of Computer Science (JCS).
- Jordanian Journal of Computers and Information Technology.
- IEEE Transactions on Parallel and Distributed Systems.
- Future Generation Computer Systems [FGCS].
- The Journal of Supercomputing.
- International Journal of Communication Systems.
- Journal of Systems Architecture [JSA].
- The ISCA International Journal of Computers and Their Applications [ISCA].
- International Journal of Parallel, Emergent, and Distributed Systems [IJPEDS].
- Journal of Computer and System Sciences [JCSS].
- Journal on Computer Science and Engineering [JCSE].
- International Journal of Computers & Applications [IJCA].
- Simulation Modelling Practice and Theory [SMPAT].
- Concurrency and Computation: Practice and Experience
- International Journal of Network Science (IJNS).
- Jordanian Journal of Computers and Information Technology (JJCIT).
- International Journal of Computer Aided Engineering and Technology (IJCAET).

EDITORIAL BOARD

- Member of the editorial board of the International Arab Journal of Information Technology [IAJIT].
- Member of the editorial board of the International Journal of Next-Generation Computing [IJNGC].
- Member of the editorial board of the Journal of Computational Intelligence and Electronic Systems.
- Member of the editorial board of the International Arab Journal of Information Technology (2018-now).

- Member of the editorial board of Al-Manarah Journal for Research and Studies (2018-now).

CONFERENCE REVIEWER

- The 20th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-2021).
- The 1st International Conference on Emerging Technology Trends in Internet of Things and Computing (TIoTC 2021).
- The 19th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-2020).
- The 29th International Conference on Computer Communications and Networks (ICCCN 2020).
- The 7th International Workshop on Trust, Security and Privacy for Big Data (TrustData 2016).
- The 15th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-2016).
- The 7th International Conference on Information and Communication Systems (ICICS 2016).
- The 16th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP 2016).
- The 9th International Conference on Security, Privacy and Anonymity in Computation, Communication and Storage (SpaCCS 2016).
- The 6th International Conference on Information and Communication Systems (ICICS 2015).
- The 14th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-2015).
- The 5th International Conference on Information and Communication Systems (ICICS 2014).
- The 4th International Conference on Information and Communication Systems (ICICS 2013).
- The 2013 IEEE International Conference on Green Computing and Communications (IEEE GreenCom 2013).
- The 5th International Symposium on Cyberspace Safety and Security (CSS-2013).
- AEECT 2013 (2013 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies).
- The 5th International Conference on Computer Science and Information Technology (CSIT 2013).
- The 11th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-2012).
- The 14th IEEE International Conference on High Performance Computing and Communications (HPCC 2012).
- The 3rd International Conference on Information and Communication Systems, ICICS 2012.

- IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies 2011 (AEECT 2011).
- IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-11).
- The Third IEEE International Symposium on Trust, Security and Privacy for Emerging Applications (TSP-10).
- The 8th ACS/IEEE International Conference on Computer Systems and Applications (AICCSA 2010) will be held in 2010 in Tunisia: http://www2.lifl.fr/AICCSA2010/.
- The 9th IEEE/ACM International Workshop on Performance Modeling, Evaluation, and Optimization of Ubiquitous Computing and Networked Systems (PMEO-UCNS'2010), to be held in conjunction with IPDPS 2010, ATLANTA (Georgia) USA, April 19-23, 2010.
- International Workshop on Performance Modeling and Analysis of High Speed Interconnects (MAHSI2009) to be held in conjunction with the IEEE International Conference on Scalable Computing and Communication (ScalCom 2009).
- IEEE International Conference on Scalable Computing and Communications [ScalCom 2009].
- The 2009 IEEE International Symposium on Trust, Security and Privacy for Pervasive Applications [TSP-09].
- The 11th IEEE International Conference on High Performance Computing and Communications [HPCC-09].
- The 3rd International Conference on Communications, Computer and Power [ICCCP-09].
- The 8th International Workshop on Performance Modeling, Evaluation, and Optimization of Parallel and Distributed Systems [PMEO-PDS'09] to be held in conjunction with [IPDPS 2009].
- The 10th IEEE International Conference on High Performance Computing and Communications [HPCC-08].
- The 2007 ACS/IEEE International Conference on Computer Systems and Applications, [AICCSA 2007].
- The 5th International Workshop on Performance Modeling, Evaluation, and Optimization of Parallel and Distributed Systems [PMEO-PDS'06] to be held in conjunction with [IPDPS 2006].

TRAINING EXPERIENCE

- The Big Data Training Program, International Centre for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI), 28th September 2020 until 25th October 2020.

  The Curriculum Contents of the course include:

  1. **Module 1: Entering the World of Big Data**
     - Introduction

- Big Data and Educational Applications
- Big Data in the Modern Society

2. **Module 2: The Science Behind Big Data Applications**
   - Introduction to Data Analysis
   - Conducting Data Analysis
   - Reporting Data Analysis

3. **Module 3: Big Data Empowered Education (Practical Exercise)**
   - Big Data Applications Scenarios in Education
   - Key Steps of Big Data Application in Education
   - Extended Reading: Introduction to Hadoop

- Training Course in PHP Programming, The Information and Communications Technology Association of Jordan – int@j, USAID Jordan Economic Development Program – SABEQ program, Public and Private Universities, Arcana Training Center, Jordan 2011.

  The Curriculum Contents of the course include:

1. **PHP I: Foundations**
   - Introduction to Programming
   - PHP Language Basics
   - PHP Variable Basics
   - PHP Control Flow Basics
   - PHP Foundation Basics
   - PHP Programming Basics
   - PHP Web & Database Basics

2. **PHP II: Higher Structures**
   - PHP Syntax Review
   - PHP Language Concepts
   - Configuring PHP
   - Regular Expressions
   - PHP Web Concepts
   - PHP Object-Oriented Programming
   - PHP Database Basics
   - Critical Aspects of Building PHP Applications

3. **Test Prep: PHP 5.3 Certification Training**
   - PHP Certification
   - PHP Basics
   - Functions
   - Data Formats & Types

- Web Features
- OOP
- Security
- Strings & Patterns
- Databases
- Arrays
- I/O

- Training session in the WEB COMPOUTING COURSE, Japan International Cooperation Agency (JICA)/ Computer Technology, Training and Industrial Studies Center (CTTISC) of Royal Scientific Society (RSS), Jordan, 2002. The Curriculum Contents of the course include:

1. **Introduction to Unix**
   - Why Unix.
   - Getting started with Unix.
   - The Unix file system.
   - Text editor.
   - Controlling Process Execution.
   - Introduction to Bourne and Korn Shell.
   - User Interfaces.

2. **Introduction to Object Oriented Methodology**
   - What is object oriented methodology.
   - What are object oriented programming languages?
   - Basic Terminology
     - What is an Object?
     - Classes.
     - Attributes.
     - Methods.
   - Object Oriented Analysis And Design.
   - Inheritance.
   - Encapsulation.
   - Abstraction.
   - Relationship.
   - Polymorphism.
   - Overloading.

3. **Introduction to SQL**

4. **HTML and Java Script**
   - Overview of HTML Page Creation.
   - Heading, Paragraphs and Breaks.
   - Character Formatting.
   - Lists.

- Images.
- Anchors, URLs, and Image Maps.
- Tables.
- Frames.
- Forms.
- Java Script Syntax.
- Basic Programming Constructs.
- Objects, Events and the Document Object Model.
- Alerts, Prompts, and Confirms.

5. **Java Programming**
   - Stand alone Application.
   - Applets.
   - Servlets.

6. **JSP (Java Server Pages)**
   - Introduction to JSP.
   - Simple JSP's.
   - JSP Tags.
   - More advanced JSP.
   - Using Beans.
   - Database Connection Using JDBC.
7. **Web Computing Workshop**
   - Development of online Web Computing application.

- Training session in the Microsoft Windows, Specialized Technical Services Company, Jordan, 1995.
- Training session in parallel computing, National Technical University of Athens (NTUA), Greece, 1996.

COURSES TAUGHT

- Graduation Project (Undergraduate Students), Al al-Bayt University, Jordan.
- Graduation Project (Graduate Students), Al al-Bayt University, Jordan.
- Operating Systems (Undergraduate Students), Al al-Bayt University, Jordan.
- Parallel Programming (Graduate Students), Al al-Bayt University, Jordan.
- Research Methods (Graduate Students), Al al-Bayt University, Jordan.
- Graphical Design for Computerized Visual Instructional Media (Graduate Students), Al al-Bayt University, Jordan.
- Webpage Design (Graduate Students), Al al-Bayt University, Jordan.
- Computer (2) for Scientific Disciplines (Undergraduate Students), Al al-Bayt University, Jordan.
- Computer Skills (1) (Undergraduate Students), Al al-Bayt University, Jordan.
- Computing Science 1P (Undergraduate Students), University of Glasgow,

U.K.

- Computing Science 1Q (Undergraduate Students), University of Glasgow, U.K.
- Web Page Design (Undergraduate Students), Al al-Bayt University, Jordan.
- Object Oriented Programming (Undergraduate Students), Al al-Bayt University, Jordan.
- Visual Programming (Undergraduate Students), Al al-Bayt University, Jordan.
- Programming in Java (Undergraduate Students), Al al-Bayt University, Jordan.
- Fundamentals of Distributed and Parallel Systems (Undergraduate Students), Al al-Bayt University, Jordan.
- Advanced Programming Tools (Undergraduate Students), Al al-Bayt University, Jordan.
- Python Programming (Undergraduate Students), Al al-Bayt University, Jordan.

LANGUAGES

- Arabic (Native).
- English.

REFERENCES

- Prof. Adnan Otoum, President of Al al-Bayt University/AABU (2019-Present), Jordan (atoumadnan@gmail.com).
- Prof. Mohamad ALkhalaileh, The World Islamic Sciences & Education University/WISE (2020-Present), Jordan (president@wise.edu.jo).
- Prof. Dia-Eddin Arafah, President of Al al-Bayt University/AABU (2014-2018), Jordan (dia.arafah@yahoo.com).
- Prof. Ismail Ababneh, Vice President, Al al-Bayt University/AABU, Jordan (ismael@aabu.edu.jo).
- Prof. Mohamed Ould-Khaoua, Department of Electrical and Computer Engineering, Sultan Qaboos University, Oman, (mok@squ.edu.om).
- Prof. Lewis Mackenzie, Computing Science Department, Glasgow University/UofG, United Kingdom, (Lewis.Mackenzie@glasgow.ac.uk).
- Prof. Ahmed Al-Dubai, School of Computing, Napier University, Edinburgh, United Kingdom (a.al-dubai@napier.ac.uk).