Academic Resume

Muhammad Al-Hashimi

Assistant Professor, Computer Science Department

I bring human and technical leadership, effective communication, team-building skills, a challenge-oriented can-do attitude, attention to detail, and a keen eye for business interests. I am fluent in both spoken and written Arabic and English. My Professional Skills include IT planning, technical leadership and project oversight, enterprise application architecture, business process (experience in academic assessment and accreditation, e-government, hospitality).

Contact Information.

Building 31, Room 139, mhashimi@kau.edu.sa.

Highest Degree.

2000, Ph.D. in Computer Science, Computer Architecture (Fault Tolerant Computing), Texas A&M University, USA.

Academic and Professional Experiences.

1. **2016 - 2017**
   Director of Academic Assessment Unit, Faculty of Computing and Information Technology, KAU.
2. **2014 - 2016**
   Vice Dean of Development (3rd Term), Faculty of Computing and Information Technology, KAU.
3. **2012 - 2014**
   Vice Dean of Development (2nd Term), Faculty of Computing and Information Technology, KAU.
4. **2010 - Present**
   Chair, Curriculum Committee, Computer Science Department, KAU.
5. **2010 - 2012**
   Vice Dean of Development, College of Computing and Information Technology, KAU.
6. **2007 - 2011**
   Deanship Council, Deanship of Community Service and Continued Education, KAU.
7. **2006 - 2010**
   Capstone Project Examination Committee, Faculty of Computing and Information Technology, KAU.
8. **2006 - 2008**
   Vice Dean for Administrative and Financial Affairs, Research and Consulting Institute, KAU.
9. **2006 - 2007**
   KAU Steering Committee for NCAAA Institutional Pilot, Office of Vice President for Development, KAU.
10. **2006 - 2006**
    Director, Diploma and Academic Affairs, Deanship of Community Service and Continued Education, KAU.

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Academic and Professional Experiences.

11. **2005 - 2006**
Academic Founding Committee for New College of Computing, Computer Science Department, KAU.
12. **2004 - 2006**
College-level Academic Accreditation Committee, Faculty of Science, KAU.
13. **2004 - 2005**
Department Council Recorder (Ameen Majlis), Computer Science Department, KAU.
14. **2002 - 2005**
Program and Curriculum Development Committee, Computer Science Dept. (Faculty of Science), KAU.

Research Interests.

Stochastic modeling and simulation of computing systems, Dependable computing, High performance computing, Exascale computing, Power-costs of computations.

Teaching Interests.

Computer Architecture, Stochastic Processes, Algorithms (Undergrad), High Performance Computing, Computing Math, Fault-tolerant Computing.

Certifications and Trainings.

1. 6-week Faculty Training in Instructional Design and Distance Learning (Virginia Tech, Blacksburg, VA).
2. ABET EC2000, College of Engineering, King Abdulaziz University.
3. Strategic Planning Seminar, King Abdulaziz University.
4. Thinking-based Learning (National Center for Teaching Thinking, Newton Center, MA).

Social, Scientific and Professional Affiliation.

1. 1990-2000, Student Member, ACM.

Last Profile Update: November 07, 2023

Publications.

1. Fahad Swilim Alqurashi, Muhammad Al-Hashimi, "An Experimental Approach To Estimation Of The Energy Cost Of Dynamic Branch Prediction In An Intel High-Performance Processor", Computers, vol: 12, pp. 139, 2023.
   DOI: 10.3390/computers12070139

2. Fares Jammal, Naif Aljabri, Muhammad Al-Hashimi, Mostafa Saleh, Osama Abulnaja, "A Preliminary Empirical Study Of The Power Efficiency Of Matrix Multiplication", Electronics, vol: 12, pp. 1599, 2023.
   DOI: 10.3390/electronics12071599

3. Muhammad Al-Hashimi, Naif Aljabri, "Exploring Power Advantage Of Binary Search: An Experimental Study", International Journal Of Advanced Computer Science And Applications, vol: 13, 2022.
   DOI: 10.14569/IJACSA.2022.0131094

4. Muhammad Jawad Ikram, Mostafa Elsayed Saleh, Muhammad Abdulhamid Al-Hashimi, Osama Ahmed Abulnaja, "Investigating The Effect Of Varying Block Size On Power And Energy Consumption Of Gpu Kernels", The Journal Of Supercomputing, 2022.
   DOI: 10.1007/s11227-022-04473-9

5. Naif Aljabri, Muhammad Al-Hashimi, Mostafa Saleh, Osama Abulnaja, "Investigating Power Efficiency Of Mergesort", The Journal Of Supercomputing, 2019.
   DOI: 10.1007/s11227-019-02850-5

6. Osama Ahmed Abulnaja, Muhammad Jawad Ikram, Muhammad Abdulhamid Al-Hashimi, Mostafa Elsayed Saleh, "Analyzing Power And Energy Efficiency Of Bitonic Mergesort Based On Performance Evaluation", Ieee Access, vol: 6, pp. 42757-42774, 2018.
   DOI: 10.1109/ACCESS.2018.2861571

7. Muhammad Jawad Ikram, Osama Ahmed Abulnaja, Mostafa Elsayed Saleh, Muhammad Abdulhamid Al-Hashimi, "Measuring Power And Energy Consumption Of Programs Running On Kepler Gpus", 2017 Intl Conf On Advanced Control Circuits Systems (Accs) Systems &Amp; 2017 Intl Conf On New Paradigms In Electronics &Amp; Information Technology (Peit), pp. 18-25, 2017.
   DOI: 10.1109/ACCS-PEIT.2017.8302995

8. Muhammad Al-Hashimi, Mostafa Saleh, Osama Abulnaja, Naif Aljabri, "On The Power Characteristics Of Mergesort: An Empirical Study", 2017 Intl Conf On Advanced Control Circuits Systems (Accs) Systems &Amp; 2017 Intl Conf On New Paradigms In Electronics &Amp; Information Technology (Peit), pp. 172-178, 2017.
   DOI: 10.1109/ACCS-PEIT.2017.8303038

9. Muhammad Abdulhamid Al-Hashimi, Osama Ahmed Abulnaja, Mostafa Elsayed Saleh, Muhammad Jawad Ikram, "Evaluating Power And Energy Efficiency Of Bitonic Mergesort On Graphics Processing Unit", Ieee Access, vol: 5, pp. 16429-16440, 2017.
   DOI: 10.1109/ACCESS.2017.2736525

10. M. Al-Hashimi, M. Saleh, O. Abulnaja, N. Aljabri, "Evaluation Of Control Loop Statements Power Efficiency: An Experimental Study", 9th Ieee International Conf. Informatics And Systems, Cairo, Egypt, December 15 - 17, pp. PDC-45-PDC-48, 2014.
    DOI: 10.1109/INFOS.2014.7036676

11. Muhammad Al-Hashimi, "Study Of The Needs Of The It Sector To The National Cadre In The Discipline Of Computing And Information Technology", , vol: 22, pp. 169-210, 2011.

12. F. Lombardi, N. Park, M. Al-Hashimi, H.H. Pu, "Modeling The Dependability Of N-Modular Redundancy On Demand Under Malicious Agreement", 2001 Pacific Rim International Symposium On Dependable Computing, pp. 68-75, 2001.
    DOI: 10.1109/PRDC.2001.992682

Publications.

13. M. Al-Hashimi, H.H. Pu, N. Park, F. Lombardi, "Dependability Under Malicious Agreement In N-Modular Redundancy-On-Demand Systems", Ieee International Symposium On Network Computing And Applications. Nca 2001, pp. 80-91, 2001.
    DOI: 10.1109/NCA.2001.962518