

Curriculum Vitae

Mohammed Amer Arafah



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Academic Qualification

Ph.D. Computer Engineering University of Southern California 1997

Los Angeles, California, USA

M.S. Computer Engineering University of Southern California, 1990

Los Angeles, California, USA

B.S. Computer Engineering College of Computer and Information Sciences 1987

King Saud University, Riyadh, Saudi Arabia

Employment

Vice Dean for Academic Affairs, College of Applied Studies and Community Service, King Saud University, Riyadh, Saudi Arabia, 2013- present.

Associate professor, Department of Computer Engineering, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia, 2017 - present.

External Supervisor, Queensland University of Technology, Australia, 2014-2016.

Chairman, Department of Computer Engineering, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia, 2007 - 2011.

Director, Natural and Engineering Sciences Program, College of Applied Studies and Community Service, King Saud University, Riyadh, Saudi Arabia, 2001-2013.

Assistant professor, Department of Computer Engineering, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia, 1997 - 2017.

Teaching Assistant, Department of Electrical Engineering–Systems, University of Southern California, Los Angeles, California, USA 1994- 1997.

LAB Assistant, Department of Electrical Engineering–Systems, University of Southern California, Los Angeles, California, USA 1988- 1994.

Teaching Assistant, Department of Computer Engineering, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia, 1987 – 1988.

Current Research Interests

Computer Networks modeling and simulation, Wireless Sensor Networks, Cooperative Relay Networks, Fault Tolerance, Switching, High-speed Networks, All Optical Networks, Quality of service.

Authored Books

- Computer Organization and troubleshooting (1) Theory, The General Organization for Technical and Vocational Training, 2001(ISBN: 9960-12-316-2).
- Computer Organization and troubleshooting (1) LAB, The General Organization for Technical and Vocational Training, 2001(ISBN: 9960-12-346-4).
- Computer Organization and troubleshooting (2) Theory, The General Organization for Technical and Vocational Training, 2002 (ISBN: 9960-12-384-7).
- Computer Organization and troubleshooting (2) LAB, The General Organization for Technical and Vocational Training, 2002 (ISBN: 9960-12-386-4).

Selected Publications

- Mohammed Arafah, Hanan Alhindi, Hassan Mathkour, Mohammed Faisal, Miltiadis D. Lytras, "Smart systems approach for development of explicit congestion marking and traffic engineering model for Diffserv/MPLS networks", Journal of Ambient Intelligence and Humanized Computing, Springer-Verlag GmbH Germany, 2018.
- Fatima Al-Shihri, **M. Arafah**, "Reliable and Energy Efficient Routing Protocol for Under Water Sensor Networks", International Journal on Semantic Web and Information Systems (IJSWIS), 2017, vol. 13, issue 2, pages 14-26, 2017.
- N. Hussain; K. Ziri-Castro; D. Jayalath; M. Arafah, "Decode-to-Cooperate: A Sequential Alamouti-Coded Cooperation Strategy in Dual-Hop Wireless Relay Networks", Telecommunication Systems, Springer, Volume 64, Number 2, 2017.
- N. Hussain; K. Ziri-Castro; D. Jayalath; M. Arafah, "Experimental Evaluation of DCOOP Protocol using USRP-RIO based testbed at 5.8GHz", IEEE 84th Vehicular Technology Conference, VTC Fall 2016, Montreal, QC, Canada, September 18-21, 2016. IEEE 2016, 2017.
- N. Hussain; K. Ziri-Castro; D. Jayalath; M. Arafah, "Efficient Multiple Relay Selection for Cooperative Communication Using Alamouti-Coded Virtual Transmit Antenna Systems", The 17th International Symposium on Wireless Personal Multimedia Communications (WPMC'2014), IEEE, Sydney, Australia, September 2014, pp. 345-350.
- M. Arafah, "COLLISION-FREE FAULT TOLERANT MULTISTAGE INTERCONNECTION NETWORKS BASED ON WAVELENGTH DIVISION MULTIPLEXING", Journal of Theoretical and Applied Information Technology (JATIT), E-ISSN 1817-3195 / ISSN 1992-8645, 2012.
- M. Arafah and N. Hussain "Dynamic Admission Control & Scheduling for Efficient Channel Utilization in LTE Networks," Science International, 2011, ISSN 1013-5316.
- M. Arafah, "DiffServ Guarantees in MPLS Networks Based on Optimal Disjoint Paths," Science International, 2011, ISSN 1013-5316.
- M. Arafah, N. Hussain, M. Z. Hourani, "Integrated Control Channel Mechanism For Efficient Channel Utilization In TDMA For WLAN Networks," 2011 International Conference on Wireless Networks (ICWN'11), July 18-21, 2011, USA.
- M. Arafah, N. Hussain, and Victor O. K. Li, 2011. Centralized Buffering and Wavelength Conversion in Multistage Interconnection Networks, The 2011 International Conference on Internet Computing (ICOMP'11), July 18-21, 2011, USA.
- M. Arafah and N. Hussain, "Establishment of Optimal Disjoint Paths in MPLS Networks," 2010 International Conference on Internet Computing (ICOMP'10), July 12-15, 2010, USA.
- M. Arafah, H. S. Al-Harbi and S. H. Bakry "Grid computing: a STOPE view," International Journal of Network Management, Volume 17, Issue 4, July-August 2007, ISSN:1099-1190.

Consultancy

- Member of the consulting team to King Saud University, Computer Center, Summer 2006.
- Member of the consulting team to Ministry of Labor and Social Affairs, Computer Center, 2004.
- Member of the consulting team to AlAmal Complex for Mental Health, Computer Center, 2003.
- Part-time Consultant, Ministry of Transport-Information Center, Riyadh, Saudi Arabia, 2002.
- Member of the consulting team to *Saline Water Conversion Corporation*, 2001.

Awards and Scholarship

- The *Ideal Instructor Award*, Department of Computer Engineering, King Saud University, 2016.
- The *Ideal Instructor Award*, College of Computer and Information Sciences, King Saud University, 2006.
- The *Ideal Instructor Award*, College of Computer and Information Sciences, King Saud University. 2005.
- The Best Teaching Assistant Award, Department of Electrical Engineering—Systems, University of Southern California, 1994.
- Prince Bandar Bin Sultan Award for Distinguished Saudi Scholars in the USA, 1990.
- Doctoral Scholarship from King Saud University, 1988.

Councils

- Member, College of Applied Studies and Community Service Council, King Saud University, 2001present.
- Member, College of Computer and Information Sciences Council, King Saud University, 2007-2011.
- Member, Computer Engineering Industrial advisory council, Department of Computer Engineering, King Saud University, 2010-2012.
- Member, Department of Computer Engineering Council, King Saud University 1997-present.
- Member, Department of Natural and Engineering Council, College of Applied Studies and Community Service, King Saud University, 2001-present.

Committees

- Head, Academic Affairs Committee, College of Applied Studies and Community Service, King Saud University, 2013-present.
- Member, Human Resources Committee, Department of Computer Engineering, King Saud University, 2007present.
- Member, Reviewing Computer & Networking Engineering Study Plan, Jouf University, 2018.
- Member, Establishing College of Computer Science and Information Technology, Majmaa University, 2012-2016
- Head, Establishing Department of Computer Engineering, Majmaa University, 2012-2016.
- Member, Establishing Department of Information Technology, Majmaa University, 2012-2016.
- Member, Establishing Department of Information Technology –Networks & Communication Systems, College of Computer and Information Sciences, Princess Noura bint Abdulrahman University.
- Member, Evaluation and Accreditation Unit, College of Applied Studies and Community Service, King Saud University, 2010-2013.
- Member, ABET Accreditation Committee, Department of Computer Engineering, King Saud University, 2012-2015.
- Head, *Quality Assurance of Bachelor of Applied Computing Committee*, Department of Natural and Engineering Sciences, King Saud University, 2010-2015.
- Head, Final Examination Committee, College of Applied Studies and Community Service, King Saud University, 2013-present.
- Member, e-Transactions Committee, Deanship of e-Transactions & Communication, 2009-2102.