

Dr. Haitham A. M. Alasha'ary

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Personal Details

Birth: Jordan (April 2, 1976)
Nationalities: Jordanian, Australian
Academic Rank: Associate Professor (since Jan. 16, 2016)

Education and Academic Qualifications

- **Ph.D. in Electrical & Computer Engineering (research)**, School of Electrical Engineering & Computer Science, Faculty of Engineering & Built Environment, the University of Newcastle, Newcastle, NSW, Australia, **December 2010**.
- **Master of Engineering Science in Biomedical Engineering (coursework)**, Graduate School of Biomedical Engineering, Faculty of Engineering, the University of New South Wales, Sydney, NSW, Australia, **October 2003**.
- **B.S. in Electronics Engineering** (Good, GPA: 71.1%), Department of Electronics Engineering, Hijawi Faculty for Engineering Technology, Yarmouk University, Irbid, Jordan, **February 2000**.

Awards & Honors

- Completion scholarship by the University of Newcastle (Australia) to complete the Ph.D. research project, 2010.
- APA-Industry scholarship by the University of Newcastle & the Australian Research Council (ARC) - Australia to conduct the Ph.D. funded linkage project, 2005 – 2009.
- Academic scholarship by Al-Hussein Bin Talal University (Jordan) to pursue:
 - the Masters degree in Biomedical Engineering in Australia, 2002 – 2003.
 - the Ph.D. degree in **Electrical and Computer Engineering** in Australia, 2005 – 2010.

Professional Experience

College of Engineering, Al-Hussein Bin Talal University, Ma'an, Jordan

- Dec. 2020 – Present *Vice-Dean*
College of Engineering
- Oct. 2020 – Oct. 2022 *Head of Department*
Department of Computer Engineering
- Dec. 2018 – Dec. 2020 *Vice-Dean for Development & Quality Affairs*
College of Engineering
- Jan. 2016 – Present *Associate Professor*
Department of Computer Engineering
- Feb. 2013 – Sep. 2016 *Head of Department*
Department of Computer Engineering
- Jan. 2011 – Jan. 2016 *Assistant Professor*
Department of Computer Engineering

Committees Membership

Committees in the College of Engineering, Al-Hussein Bin Talal University, Ma'an, Jordan

- Member and secretary of the College Higher Studies Committee, (academic years 2015/2016, 2020/2021, 2021/2022, 2022/2023).
- Chairman of the Department Higher Studies Committee, Department of Computer Engineering, (academic years 2015/2016, 2020/2021, 2021/2022).
- Member of the Department Higher Studies Committee, Department of Computer Engineering, (academic years 2016/2017, 2018/2019, 2019/2020, 2022/2023).
- Member of the committee assigned for re-evaluating and re-constructing the academic study plan for the Masters Degree of Renewable Energy Engineering, Faculty of Engineering, Al-Hussein Bin Talal University (Semester 2, 2015/2016).
- Member of the committee assigned for the proposal of opening a new study program for bridging Diploma students, Faculty of Engineering, Al-Hussein Bin Talal University (Semester 1, 2015/2016).

Other Committees

- Member and examiner in the organizing and steering committee, The 5th National Technology Parade for undergraduate graduation projects, Hashemite University, Zarqa, Jordan (May 7-8, 2012).

Courses Taught

Electric Circuits I (plus lab)
Electronics I (plus lab)

Electric Circuits II (plus lab)
Electronics II (plus lab)

Digital Electronics (plus lab)

Control Systems (plus lab)

Distributed Systems

Signals and Systems

Engineering Mathematics I

Discrete Mathematics

Analog & Digital Communications

Introduction to Engineering

Computer Engineering Graduation Projects

Digital Image Processing (undergraduate & postgraduate levels)

Logic Circuits Design (plus lab)

Digital Control Systems

Neural Networks and Fuzzy Logic

Artificial Intelligence

Engineering Mathematics II

Modelling and Simulation

Engineering Applications (MATLAB)

Communication Skills

In addition, the ability to teach the following courses (but not limited to):

Numerical Analysis

Electric Machines

Electronic Devices

Digital Signal Processing

Applied Probabilities

Embedded Systems

Instrumentations and Measurements

Advanced Programming Using MATLAB

Professional Memberships

- Member of the Jordanian Engineers Association (JEA)

Feb. 2000 - present

Skills and Attributes

➤ **Professional & Personal Skills**

- Research and analysis skills
- Interpersonal and communication skills
- Ability to work in a team and unsupervised
- Independent problem solving
- Project and time management
- Ability to work under pressure and meet deadlines
- Ability to accomplish multiple tasks accurately and timely
- Enthusiasm and passion for work with all people
- Reliability and great attention to details
- Well organized and creative

➤ **Computer Skills**

- Excellent knowledge in the various MS Office applications.
- Computer programming software: MATLAB, Visual Basic.
- Modelling/simulation packages: ANFIS, SIMULINK, PSpice, EWB, CircuitMaker.
- High level skills in using Windows-based applications/programs and internet web.

Research and Publications

Conference Proceedings

- **Alasha'ary, H. A.**; Moghtaderi, B.; Page, A. W.; Sugo, H. O. “*Application of a Neuro-Fuzzy Model to Evaluate the Thermal Performance of Typical Australian Residential Masonry Buildings - IP*”. CCESD-II: The 2nd Canadian Conference on Effective Design of Structures: Sustainability of Civil Engineering Structures, McMaster University, Hamilton, Ontario, Canada, **19th - 22nd May 2008**.
- **Alasha'ary, H. A.**; Moghtaderi, B.; De Dona J. A.; Page A. W. “*Application of a Neuro-Fuzzy Model to Evaluate the Thermal Performance of Typical Australian Residential Masonry Buildings*”. The 14th International Brick & Block Masonry Conference, Sydney, NSW, Australia, **18th – 21st February 2008**.

Scientific Journal Articles

- **Haitham Alashaary**, Mohamed R. Gomaa, Hani Al-Rwashdeh. “*Modeling Simulation of Combined Absorption Cooling and Heating Systems by TRNSYS Software*”. International Journal on Energy Conversion (IRECON), **13(2), 58-67 (March 2025)**. DOI: 10.15866/irecon.v13i2.25680 (**Q2**).
- **Haitham Ali Alashaary**, Ghadeer Nyazi Al Shaba'an, Wael Fawzi Abu Shehab, Shehab Abdulwadood Ali. “*Estimation of Harmonic Impedance and Resonance in Power Systems*”. International Journal of Electrical and Computer Engineering (IJECE), **15(1), 67-75 (February 2025)**. DOI: 10.11591/ijece.v15i1.pp67-75 (**Q2**).
- T. Alshamaseen, S. Althunibat, M. Qaraqe, **H. Alashaary**. “*Phase-Assisted NOMA Based Key Distribution for IoT Networks*”. Transactions on Emerging Telecommunications Technologies, **34(4), 1-17 (February 2023)**. DOI: 10.1002/ett.4738 (**Q1**).
- W. F. Abu Shehab, A. Salah, W. Al-Sawalmeh, **H. Alashaary**. “*Few-Mode Optical Fiber SPR Sensor with Controllable Range of Measured Refractive Index*”. International Journal of Electrical and Computer Engineering (IJECE), **13(1), 454-464 (February 2023)**. DOI: 10.11591/ijece.v13i1.pp454-464 (**Q2**).
- Wael H. AL-Sawalmeh, Mohd H.S Alrashdan, Mahmoud A. Alnaanah, **Haitham A. M. Alasha'ary**, K. Daqrouq. “*Study of the Effects of Control Factors on Speech Features Using Taguchi Method*”. International Review of Electrical Engineering (IREE), **17(1), 99-104 (February 2022)**. DOI: 10.15866/iree.v17i1.21145 (**Q2**).
- Mohd H.S Alrashdan, Abed-Al-Rahman M.S Al-sharqi, Wael H AL-Sawalmeh, Mohammad Ibrahim Alsharari, **Haitham A. M. Alashaa'ry**. “*Multi-Variable Single-Objective Optimal Power Flow of IEEE-14 Bus System Using Artificial Bee Colony Algorithms*”. International Journal of Smart Grid and Clean Energy (IJSGCE), **9(6): 958-966 (2020)**. DOI: 10.12720/sgce.9.6.958-966 (**Q4**).
- Wael H. AL-Sawalmeh, Mohd H. S. Alrashdan, **Haitham A. M. Alashaa'ry**. “*Experimental Monitoring System Using Arduino Microcontroller in Studying the Effect of Temperature and Light Intensity of Solar Cell Output Power in Ma'an Development Area*”. International Journal of Smart Grid and Clean Energy (IJSGCE), **10(2): 157-161 (2021)**. DOI: 10.12720/sgce.10.2.157-161.

- **Alasha'ary, H. A.**; Al-Hasanat, A. I.; Matrouk, K. M.; Alqadi, Z. A. “*Analysis and Optimization of PID Controller Parameters for a Second-Order Transfer Function*”. Middle-East Journal of Scientific Research (MEJSR), **23(8): 1685-1691 (2015)**.
- Al-Hasanat, A. I.; Matrouk, K. M.; **Alasha'ary, H. A.**; Alqadi, Z. A. “*Connectivity-Based Clustering Algorithm for Data Gathering with Path-Constrained Mobile Sink in Wireless Sensor Networks*”. Wireless Sensor Network Journal (WSN), **6(6): 118-128 (June 2014)**.
- **Alasha'ary, H. A.**; Al-Hasanat, A. I.; Matrouk, K. M.; Alqadi, Z. A.; Al-Shalabi, H. M. “*A Novel Digital Filter for Enhancing Dark Gray Images*”. European Journal of Scientific Research (EJSR), **122(1): 99-106 (April 2014)**.
- Al-Hasanat, A. I.; **Alasha'ary, H. A.**; Matrouk, K. M.; Alqadi, Z. A.; Al-Shalabi, H. M. “*Experimental Investigation of Training Algorithms Used in Backpropagation Artificial Neural Networks to Apply Curve Fitting*”. European Journal of Scientific Research (EJSR), **121(4): 328-335 (April 2014)**.
- Matrouk, K. M.; Al-Hasanat, A. I.; **Alasha'ary, H. A.**; Alqadi, Z. A.; Al-Shalabi, H. M. “*Analysis of Matrix Multiplication Computational Methods*”. European Journal of Scientific Research (EJSR), **121(3): 258-266 (April 2014)**.
- Matrouk, K. M.; **Alasha'ary, H. A.**; Al-Hasanat, A. I.; Alqadi, Z. A.; Al-Shalabi, H. M. “*Investigation and Analysis of ANN Parameters*”. European Journal of Scientific Research (EJSR), **121(2): 217-225 (April 2014)**.
- Matrouk, K. M.; Al-Hasanat, A. I.; **Alasha'ary, H. A.**; Alqadi, Z. A.; Al-Shalabi, H. M. “*Speech Fingerprint to Identify Isolated Word-Person*”. World Applied Sciences Journal (WASJ), **31(10): 1767-1771 (May 2014)**.
- **Alasha'ary, H. A.**; Matrouk, K. M.; Al-Hasanat, A. I.; Alqadi, Z. A.; Al-Shalabi, H. M. “*Improving Matrix Multiplication Using Parallel Computing*”. International Journal on Information Technology (IREIT), **1(6): 346-349 (November 2013)**.
- **Alasha'ary, H. A.**; Moghtaderi, B.; Page, A. W.; Sugo, H. O. “*A Neuro-Fuzzy Model for Prediction of the Indoor Temperature in Typical Australian Residential Buildings*”. International Journal of Energy and Buildings, **41: 703-710 (2009)**.

Referees

Available upon request.