Abdullah Saeed Balamash

Associate Professor, Department of Electrical and Computer Engineering, King Abdulaziz University

Education

Degree	*Field of Study*	*Institution*	*Year*
Ph.D.	Computer Engineering	University of Arizona	2004
MS	Computer Engineering	Syracuse University	1998
BS	Computer Engineering	King Abdulaziz University	1991

Academic Experience

From To	*Institution*	*Rank*	*Title*	*Full or Part Time*
2004 2015	King Abdulaziz University	Assistant Professor	DR.	Full Time
2015 Present	King Abdulaziz University	Associate Professor	DR.	Full Time

Non-Academic Experience *(Including Consultations)*

- Saudi Consolidated Electricity Company (SCECO), Information Systems Department, Jeddah: System Programmer (June 1991 – May 1994)
- 2006-2013, IT manager at the Faculty of Engineering
- 2006-2017, Director of the scientific Equipment Maintenance Center
- 2013-2015, Statistics Department Manager, Deanship of Research
- 2015-Present, Deputy Director of the Center of Excellence in Intelligent Engineering Systems
- 2018-Present Chairman of the Electrical and Computer Engineering Department

Funded Research Projects and Patents From The Last Five Years

- Distinct Research Study grant by the deanship of research, KAU, 2015-2016
- Collaborative Research Program grant by the Ministry of Education, 2019-2020

Certifications and Professional Registrations

Current Membership in Professional Societies and Organizations

Society/Organization	*Rank*	*Since*
• Institute of Electrical and Electronics Engineers (IEEE)		since 1996

Institutional and Professional Services

- A chair for the judgment committee of Mawhebah Olympic Competition for Innovation, Makkah, 2011
- A member of the KAU high performance computing committee, 2011
- A member of the judgment committee of Ibtikar exhibition, 2010
- A consultant for Mawhebah Gifted Students Summer Camp, King Abdulaziz University, 2007 and 2008

Principal Publications/Presentations from the Past Five Years

[1] A. Balamash, W. Pedrycz, R. Al-Hmouz, and A. Morfeq, “An expansion of fuzzy information granules through successive refinements of their information content and their use to system modeling,” *Expert Syst. Appl.*, vol. 42, no. 6, pp. 2985–2997, Apr. 2015.

[2] “An Investigation of Wavelet Average Framing LPC for Noisy Speaker Identification Environment.” [Online]. Available: https://www.hindawi.com/journals/mpe/2015/598610/abs/. [Accessed: 20-Oct-2019].

[3] R. Al-Hmouz, W. Pedrycz, A. Balamash, and A. Morfeq, “Description and classification of granular time series,” *Soft Comput.*, vol. 19, no. 4, pp. 1003–1017, Apr. 2015.

[4] R. Al-Hmouz, W. Pedrycz, and A. Balamash, “Description and prediction of time series: A general framework of Granular Computing,” *Expert Syst. Appl.*, vol. 42, no. 10, pp. 4830–4839, Jun. 2015.

[5] W. Pedrycz, R. Al-Hmouz, A. S. Balamash, and A. Morfeq, “Designing granular fuzzy models: A hierarchical approach to fuzzy modeling,” *Knowl.-Based Syst.*, vol. 76, pp. 42–52, Mar. 2015.

[6] W. Pedrycz, R. Al-Hmouz, A. Morfeq, and A. S. Balamash, “Distributed proximity-based granular clustering: towards a development of global structural relationships in data,” *Soft Comput.*, vol. 19, no. 10, pp. 2751–2767, Oct. 2015.

[7] “Fuzzy decision making and consensus: Challenges - IOS Press.” [Online]. Available: https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs1719. [Accessed: 20-Oct-2019].

[8] “Granular autoencoders: concepts and design | SpringerLink.” [Online]. Available: https://link.springer.com/article/10.1007/s00500-019-03916-5. [Accessed: 20-Oct-2019].

[9] R. Al-Hmouz, W. Pedrycz, A. S. Balamash, and A. Morfeq, “Granular description of data in a non-stationary environment,” *Soft Comput.*, vol. 22, no. 2, pp. 523–540, Jan. 2018.

[10] W. Pedrycz, R. Al-Hmouz, A. S. Balamash, and A. Morfeq, “Hierarchical Granular Clustering: An Emergence of Information Granules of Higher Type and Higher Order,” *IEEE Trans. Fuzzy Syst.*, vol. 23, no. 6, pp. 2270–2283, Dec. 2015.

[11] R. Al-Hmouz, W. Pedrycz, A. S. Balamash, and A. Morfeq, “Hierarchical System Modeling,” *IEEE Trans. Fuzzy Syst.*, vol. 26, no. 1, pp. 258–269, Feb. 2018.

[12] M. S. Hanif, M. Bilal, K. Munawar, and A. S. Balamash, “Implementation of an Embedded Testbed for Indoor SLAM,” in *2018 IEEE/ACS 15th International Conference on Computer Systems and Applications (AICCSA)*, 2018, pp. 1–8.

[13] R. Al-Hmouz, W. Pedrycz, A. Balamash, and A. Morfeq, “Logic-driven autoencoders,” *Knowl.-Based Syst.*, vol. 183, p. 104874, Nov. 2019.

[14] A. Balamash, W. Pedrycz, R. Al-Hmouz, and A. Morfeq, “Perspective-oriented data analysis through the development of information granules of order 2,” *Int. J. Approx. Reason.*, vol. 85, pp. 97–106, Jun. 2017.

[15] F. J. Cabrerizo, R. Al-Hmouz, A. Morfeq, A. S. Balamash, M. A. Martínez, and E. Herrera-Viedma, “Soft consensus measures in group decision making using unbalanced fuzzy linguistic information,” *Soft Comput.*, vol. 21, no. 11, pp. 3037–3050, Jun. 2017.