

CV
Hiam H. Alquran, Ph.D

*Associate Professor, Department of Biomedical Systems and Informatics Engineering
Hijawi faculty for Engineering Technology, Yarmouk University*

EDUCATION

Degree	Discipline	Institution	Year
Ph.D.	Biomedical Engineering and Biotechnology	UMASS Lowell	2014
M.S.	Industrial Automation	Yarmouk University	2008
B.S.	Biomedical Engineering	Jordan University of Science and Technology	2005

ACADEMIC EXPERIENCE

- **Associate Prof in Biomedical engineering Department – Yarmouk University Sept 2014 – current, Full-time**
- **Biomedical engineering instructor – Yarmouk University Feb 2009 – Aug 2010, Full-time**
- **Research assistant – BME Department – Yarmouk University July 2005 – 2008, Full-time**
- **Teaching assistant – Eng colleague – Yarmouk University Feb 2006 – Feb 2009, Part-time**
- **Practical training – Rashid Bin Al-hassan hospital (Jordan) Sept 2005 – 2006 Sept Part-time**

HONORS AND AWARDS

- Yarmouk University , P.hD scholarship (2010-2014).
- Higher Education Ministry Postgraduate Scholarship (HEMPS) 2005-2008
- Higher Education Ministry Undergraduate Scholarship (HEMUS) 2000-2005

FUNDED RESEARCH GRANTS

1. Generated pseudo MR images from Real CT images, Scientific Research Support Fund-Jordan,2016.
2. Noninvasive blood pressure measurements using optical Technique, Scientific Research Support Fund-Jordan,2016.

SELECTED PUBLICATIONS

1. **Alquran, Hiam**, et al. "The melanoma skin cancer detection and classification using support vector machine." *2017 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT)*. IEEE, 2017.
2. Alqudah, Ali Mohammad, Alaa Albadarneh, Isam Abu-Qasmieh, and **Hiam Alquran**. "Developing of robust and high accurate ECG beat classification by combining Gaussian mixtures and wavelets features." *Australasian physical & engineering sciences in medicine* 42, no. 1 (2019): 149-157.
3. Alqudah, Ali Mohammad, **Hiam Alquraan**, Isam Abu-Qasmieh, and Alaa Al-Badarneh. "Employing Image Processing Techniques and Artificial Intelligence for Automated Eye Diagnosis Using Digital Eye Fundus Images." In *Journal of Biomimetics, Biomaterials and Biomedical Engineering*, vol. 39, pp. 40-56. Trans Tech Publications, 2018.

4. Abu-Qasmieh, Isam F., and **Hiam H. Al-Quran**. "Automatic human body weight estimation using morphological image processing and surface fitting." In *Proceedings of the 12th IASTED International Conference*.
5. **H. Alquran**, A. M. Alqudah, I. A. Qasmieh and S. Almashaqbeh, "Gaussian Model of Electrooculogram Signals," 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), Amman, Jordan, 2019, pp. 293-296, doi: 10.1109/JEEIT.2019.8717499.
6. Almashaqbeh, Sami, Qasem Qananwah, **Hiam Alquran**, Aya Alomari, and Roa Alzain. "Spinal Curvature Kinematics of Stair Ascending for the Second and the Third Trimesters of Simulated Pregnancy in a Month by Month Basis." In *2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)*, pp. 277-280. IEEE, 2019.
7. **Alquran, Hiam**, Isam Abu-Qasmieh, Sujoud Khresat, Abeer Bani Younes, and Shaimaa Almomani. "Weight estimation for anesthetic administration using singular value decomposition and template matching for supine subject of different obesity levels." *Health and Technology* 8, no. 4 (2018): 265-269.
8. Abu-Qasmieh, Isam, and **Hiam Al-quran**. "Unrestricted LR detection for biomedical applications using coarse-to-fine hierarchical approach." *IET Image Processing* 12, no. 9 (2018): 1639-1645.
9. Alqudah, A. M., Alquraan, H., Qasmieh, I. A., Alqudah, A., & Al-Sharu, W. (2020). Brain Tumor Classification Using Deep Learning Technique--A Comparison between Cropped, Uncropped, and Segmented Lesion Images with Different Sizes. *arXiv preprint arXiv:2001.08844*.
10. **Alquran, H.**, et al. "ECG classification using higher order spectral estimation and deep learning techniques." *Neural Network World* 29.4 (2019): 207-219.
11. Alqudah, Ali Mohammad, **Hiam Alquraan**, and Isam Abu Qasmieh. "Segmented and Non-Segmented Skin Lesions Classification Using Transfer Learning and Adaptive Moment Learning Rate Technique Using Pretrained Convolutional Neural Network." *Journal of Biomimetics, Biomaterials and Biomedical Engineering*. Vol. 42. Trans Tech Publications Ltd, 2019.
12. Alqudah, A. M., Qazan, S., **Alquran, H.**, Qasmieh, I. A., & Alqudah, A. COVID-2019 DETECTION USING X-RAY IMAGES AND ARTIFICIAL INTELLIGENCE HYBRID SYSTEMS.
13. Qananwah, Q., Dagamseh, A., **AlQuran, H.**, & Ibrahim, K. S. Monitoring Blood Pressure Using Regression Techniques. *International Journal of Biomedical and Biological Engineering*, 14(1), 29-33.
14. Qananwah, Q., Dagamseh, A., **Alquran, H.**, Ibrahim, K. S., Alodat, M. D., & Hayden, O. (2020). A comparative study of photoplethysmogram and piezoelectric plethysmogram signals. *Physical and Engineering Sciences in Medicine*, 1-11.

PROFESSIONAL DEVELOPMENT ACTIVITIES

- _ **Matlab programming.**
- _ **C++ programming.**
- _ **Software and Hardware computer maintenance.**
- _ **Circuit maker design.**
- _ **Pspice software.**