
Personal Information

Name : **Hayat Al-Dmour**
E-mail : Hdmour@mutah.edu.jo
HayatDmour@gmail.com

Professional Overview

Dedicated Assistant Professor with experience in teaching, research, and service in the area of computer science. Combines a passion for scholarly work presentation and publishing with a focus on student achievement.

Languages

- Arabic: Excellent Reading, Writing, and Speaking (mother tongue).
 - English: Excellent Reading, Writing, and Speaking.
-

Education

1. University of Technology Sydney (July 2013 – February 2018)

- PhD degree in information hiding and segmentation for medical images, Center for Health Technology, School of Biomedical Engineering.
- Thesis Title: Enhancing Information Hiding and Segmentation for Medical Images using Novel Steganography and Clustering Fusion Techniques

2. Yarmouk University, Irbid - Jordan 2007

- Master's degree in computer science.

3. Mutah University, Karak- Jordan 2005

- Bachelor's degree in computer science.
-

Work Experience

11/2007-7/2013 **Lecturer, Mutah University - Jordan**
5 years of experience in teaching at Mutah University (Information Technology Department).

9/2018-Present **Assistant Professor, Mutah University – Jordan**

Teaching:

Introduction to Information Technology, Information System, Discrete Structure, computer skills (MS Excel, MS Access, FrontPage), Programming language using C++, Object Oriented, Internet Application Programming, Software Project Management, Digital Logic design, Data structure, Multimedia System, Natural Language Processing, Computer and Network Security, Information Retrieval System, Computer Graphics, Graduation Projects.

Journal Papers:

1. **Hayat Al-Dmour** and Ahmed Al-Ani. "A steganography embedding method based on edge identification and XOR coding." *Expert Systems with Applications* 46 (2016): 293-306.
2. **Hayat Al-Dmour** and Ahmed Al-Ani. "Quality Optimized Medical Image Information Hiding Algorithm that Employs Edge Detection and Data Coding." *Computer Methods and Programs in Biomedicine*. 127 (2016): 24-43.
3. **Hayat Al-Dmour** and Ahmed Al-Ani. "A clustering fusion technique for MR brain tissue segmentation." *Neurocomputing* 275 (2018): 546-559.

4. **Hayat Al-Dmour**. "Ramifications of incorrect image segmentations; emphasizing on the potential effects on deep learning methods failure." *Journal of Big Data 9.1* (2022): 1-14.

Conference Papers:

1. **Hayat Al-Dmour**, Ahmad Al-Ani, and Hung Nguyen. "An efficient steganography method for hiding patient confidential information." *Engineering in Medicine and Biology Society (EMBC), 2014 36th Annual International Conference of the IEEE*. IEEE, 2014.
2. **Hayat Al-Dmour**, Noman Ali, and Ahmed Al-Ani. "An Efficient Hybrid Steganography Method Based on Edge Adaptive and Tree Based Parity Check." *MultiMedia Modeling*. Springer International Publishing, 2015.
3. **Hayat Al-Dmour** and Ahmed Al-Ani. "Quality optimized medical image steganography based on edge detection and hamming code." *Biomedical Imaging (ISBI), 2015 IEEE 12th International Symposium on*. IEEE, 2015.
4. **Hayat Al-Dmour** and Ahmed Al-Ani. "A Medical Image Steganography Method Based on Integer Wavelet Transform and Overlapping Edge Detection." *Neural Information Processing*. Springer International Publishing, 2015.
5. **Hayat Al-Dmour** and Ahmed Al-Ani. "MR Brain Image Segmentation Based on Unsupervised and Semi-Supervised Fuzzy Clustering Methods." In *Digital Image Computing: Techniques and Applications (DICTA), 2016 International Conference on*, pp. 1-7. IEEE, 2016.
6. Hayat Al-Dmour and Ahmed Al-Ani. "MR Brain Tissue Segmentation Based on Clustering Techniques and Neural Network." In *International Conference on Image Analysis and Processing* (pp. 225-233). Springer, Cham.
7. Tanvir Anwar and **Hayat Al-Dmour**. "RBF based adaptive neuro-fuzzy inference system to torque estimation from EMG signal." In *2017 IEEE symposium series on computational intelligence (SSCI)* (pp. 1-8). IEEE, 2017, November.

Research Interests

- Image Processing and Analysis.
- Information Hiding.
- Machine Learning.

Award

- 2017 Higher Degree by Research Publication Award.
- 2016 Higher Degree by Research Publication Award.
- PhD Graduate Student Scholarship, Mutah University, Jordan, to pursue PhD study in Computer Science in Australia, 2013-2018.