



Hadeel Kassim ALJOBURI

Baghdad, Iraq

[Tel]: (+964) 77 1000 24 84

[E-mail]: hadeel_bme77@yahoo.com

EDUCATION

- Ph.D.: Electrical and Electronics Engineering-Biomedical Program, 2017
Dissertation Title: "Clustering Functional MRI Data using a Robust Unsupervised Learning Algorithm"
Dissertation Advisor: Assoc. Prof. Dr. İlyas ÇANKAYA
Ankara Yıldırım Beyazıt University, Turkey
- M.S.: Medical Engineering, 2004
AL-Nahrain University, Baghdad, Iraq
- B.S.: Biomedical Engineering, 2000
University of Baghdad, Baghdad, Iraq

EMPLOYMENT

- (2012-17) *Ph.D. Fellow*, Department of Electrical and Electronics Engineering, ANKARA YILDIRIM BEYAZIT UNIVERSITY GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES, Turkey.
- (2004-12) *Instructor*, Department of Biomedical Engineering, AL-NAHRAIN UNIVERSITY COLLEGE OF ENGINEERING, Baghdad, Iraq.
- (2001-04) *M.Sc. student*, Department of Medical Engineering, AL-NAHRAIN UNIVERSITY COLLEGE OF ENGINEERING, Baghdad, Iraq.
- (2000-01) *Biomedical Engineer*, AL-KADHYMIA EDUCATIONAL HOSPITAL, Baghdad, Iraq.

LANGUAGES

Arabic (mother language), English, Turkish.

HONORS & AWARDS

Turkish Government Scholarships for International Students, 2012

TEACHING EXPERIENCE

- Mathematics I. (MDER110: Undergraduate Course)
- Mathematics II. (MDER120: Undergraduate Course)
- Physics. (PHYS120: Undergraduate Course)
- Electrical Circuits I. (MDER111: Undergraduate Course)
- Electrical Circuits II. (MDER121: Undergraduate Course)
- Electronics I. (MDER212: Undergraduate Course)
- Electronics II. (MDER221: Undergraduate Course)
- Electromagnetic fields. (MDER222: Undergraduate Course)
- Medical Equipment. (MDER315: Undergraduate Course)
- Control I. (MDER512: Undergraduate Course)
- Control II. (MDER522: Undergraduate Course)
- Project. (CREQ510: Undergraduate Course)
- Project. (CREQ520: Undergraduate Course)

RESEARCH

- (2015-) Neuroscience interactive mining of fMRI data using model-free and model-based approaches.
- (2014-2017) Statistical Parametric Mapping (SPM) & unsupervised clustering algorithms.
- (2014-2015) Biosignal processing and medical imaging software package design based on MATLAB GUI.
- (2011-2014) Biomedical signal processing techniques.
- (2016) Design and implementation of high voltage generator for medical applications.
- (2016) Design a graphical user interface of linear algebra system package using MATLAB.
- (2013) A survey on optical fiber sensors for telemedicine applications.
- (2011) Photo Dynamic Therapy (PDT) with biological tissues using Nd:Glass laser.
- (2010-2011) Design an exact electrical equivalent circuit for invasive blood pressure measurement using a catheter.
- (2009-2011) Design and implementation of wireless ECG system for telecare.
- (2009-2010) Radioactive medicine using Nuclear Medicine Imaging (NMI).

(2008-2009) Pulse oximeter design for oxygen saturation and heart monitoring rate.

(2008-2009) Studying the design of the biosignal interfacing system.

(2003-2007) Computer-based ECG signal analysis and monitoring system.

(1999-2000) The interaction of Nd-Glass laser with biological tissues.

SERVICE AND MEMBERSHIPS

Memberships:

- Iraqi Engineering Union

University Service:

- Postgraduate Student Committee of the Medical Engineering Department, head (2010-12)
- Graduate Student Committee of the Biomedical Engineering Department, head (2017-)

Member of Technical Program Committee (TPC):

- Al-Sadiq International Conference on Multidisciplinary in IT and Communication Science and Applications (AIC-MITC 2016), IEEE sponsored (pending), April 18-20 2016, Baghdad, IRAQ

Manuscript Reviewerships:

- International Journal Of Machine Learning And Cybernetics, SPRINGER

PUBLICATIONS

A) PEER-REVIEWED JOURNALS:

- A1 Aljobouri, H. K. and N. K. Alani. Computer-Based ECG Signal Analysis and Monitoring System. *Al-Khwarizmi Engineering Journal* 4(3):120-127, 2008.
- A2 Aljobouri, H. K. and A. A. Aldergazly. Photo Dynamic Therapy (PDT) with Biological Tissues using Nd:Glass Laser. *Journal Engineering* 17(4):886-897, 2011.
- A3 Aljobouri, H. K. A Survey on Optical Fiber Sensors for Telemedicine Applications. *Journal of Biomedical Engineering, Horizon Research Publishing HRPUB-USA-Universal* 1(1):1-5, 2013.
- A4 Aljobouri, H. K. Çankaya, I. and O. Karal. From Biomedical Signal Processing Techniques to fMRI Parcellation. *Biosciences Biotechnology Research Asia* 12 (2): 1115–1138, 2015.
- A5 AlJobouri, H. K. Alziarjawey, H. A. and I. Çankaya. Biosignal Processing, Medical Imaging and fMRI (BSPMI) Software Package Based on MATLAB

GUI for Education and Research. *International Journal of Scientific Research in Information Systems and Engineering* 1 (2):2380-8128, 2015.

- A6 Jaber, H. A. Çamdalı, Ü. Çankaya, I. and H. K. AlJobouri. Design Graphical User Interface of Linear Algebra System Package by Using MATLAB. *International Journal on Recent and Innovation Trends in Computing and Communication* 4(6):428-433, 2016.
- A7 Jaber, H. A. AlJobouri, H. K. Kivrak S. and I. Çankaya. Design and Implementation of High Voltage Generator for Medical Applications. *International Journal of Science and Engineering Investigations* 6(60):118-122, 2017.
- A8 AlJobouri, H. K. Jaber, H. A. and I. Çankaya. Performance Evaluation Of Prototype-Based Clustering Algorithms Combined MDL Index. *Computer Applications in Engineering Education, Wiley Inc.* 25(4): 642–654, 2017.
- A9 AlJobouri, H. K. Jaber, H. A. Koçak, O. M. and I. Çankaya. Clustering fMRI data with a Robust Unsupervised Learning Algorithm for Interactive Neuroscience Data Mining. *Applied Magnetic Resonance, Springer*, under review, 2017.

B) PEER REVIEWED PAPERS IN CONFERENCE PROCEEDINGS:

- B1 Aljobouri H. K. Wireless Bioinstrumentation for Telecare. *1st Middle East Conference on Biomedical Engineering MECBME'11, Sharjah-UAE, IEEE Xplore* 5-10, 2011.

C) ABSTRACTS IN CONFERENCE PROCEEDINGS:

- C1 AlJobouri, H. K. Alziarjawey, H. A. and I. Çankaya. Biosignal Processing and Medical Imaging (BSPMI) Software Package Based on Matlab GUI for Education and Research. *3rd International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2015), Girne American University* 39, 2015.

D) INVITED PRESENTATIONS:

- D1 2nd Scientific Conference of Al-Khwarizmi Engineering College (University of Baghdad, Nisan 22, 2008).
- D2 Symposium Scholarly: The Medical Engineering in Society Serving, "Medical Applications in Telemedicine" (Al-Nahrain University, College of Engineering, November 16, 2009).
- D3 Al-Nahrain Spring Festival "Cardio Angiography with Heart Catheterization" (Al-Nahrain University, College of Engineering, Nisan 20-21, 2010).
- D4 1st Middle East Conference on Biomedical Engineering MECBME'11, (American University of Sharjah, February 21-24, 2011).

- D5 3rd International Symposium on Engineering, Artificial Intelligence and Applications ISEAIA 2015, (Girne American University-North Cyprus, November 4-6, 2015)

F) THESIS:

- E1 The interaction of Nd-Glass with biological tissues. B.Sc. Thesis. University of Baghdad, Baghdad, Iraq, 2000.
- E2 Designation of interface and software program as a base of ECG monitoring and signal analysis. M.Sc. Thesis. AL-Nahrain University, Baghdad, Iraq, 2004.
- E3 Clustering Functional MRI Data using a Robust Unsupervised Learning Algorithm. Ph.D. Thesis. Ankara Yıldırım Beyazıt University, Turkey, 2017.