

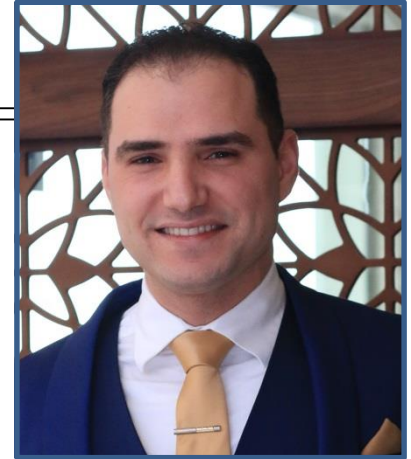
Yazan Mahmoud Nimer Dweiri

Ph.D. Biomedical Engineering

Assistant Professor, Department of Biomedical Engineering

Jordan University of Science and Technology

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Education

Case Western Reserve University, Cleveland, OH.

Doctor of Philosophy in biomedical Engineering, Jan 2016.

Case Western Reserve University, Cleveland, OH.

Master of Science in biomedical Engineering, Jan 2011.

Jordan University of science and Technology, Irbid, Jordan.

Bachelor of Biomedical Engineering, June 2007

RESEARCH AND PROFESSIONAL EXPERIENCE

Feb 2016 – Present **Full-Time Assistant Professor-** Jordan University of Science and Technology. P.O. Box 3030 - Irbid -22110- Jordan

Taught Classes:

- Control and Communication in the Nervous System
- Introduction to Biomechanics
- Biofluid Mechanics
- Introduction to Biomedical Materials
- Digital Signal Processing
- Digital Logic Design and Computer Architecture Laboratory
- Electrical Circuits Analysis
- Medical Electronics Laboratory
- Microcontrollers and Embedded Systems
- Microcontrollers and Embedded Systems Laboratory
- Biomedical Instrumentations
- Biomedical Design
- Biomedical Electronics

May. 2019 – Sept 2019 **Visiting Postdoctoral Researcher-** Case Western Reserve University, Cleveland Ohio, USA

Research Title: “EEG Recording from the Ear Canal for Epilepsy Monitoring”

Sept. 2016 – Jan 2017 **Adjunct Assistant Professor (Dual Appointment)-** German-Jordanian University, Madaba, Jordan

Taught Classes:

- Physiological Modeling and Control Systems
- Physiological Modeling and Control Systems Laboratory

August 2010 – Jan 2016 **Research Assistant; Ph.D. Candidate-** Neural Engineering Center, Case Western Reserve University, Cleveland, OH 44109

Thesis Title: “Extracting Voluntary Activity of Fascicular Sources within Peripheral Nerves with Cuff Electrodes”

June 2010 – January 2011 **Research Assistant** - UHHS- Case Medical Center, Cleveland, Ohio, USA

Research Title: “EEG Recording for Epilepsy Monitoring from the Ear Canal”

July 2009 – Aug 2010 **Consultant in Neuromodulation Design,** Consultant, Inspire Medical Systems, INC. Minneapolis, MN.

Research Title : “Electrical Stimulation of the Hypoglossal Nerve for Obstructive Apnea”

July 2007 – June 2008 **Research and teaching assistant,** German Jordanian University, Amman, Jordan.

CERTIFICATIONS

- Lab Safety (OSHA)
- Blood-Borne Pathogen (OSHA)
- Information Security Awareness (VAMC)
- Privacy Awareness (VAMC)
- Environment of Care (EOC) Safety (VAMC)
- Human Research (VAMC)
- Research Safety (VAMC)
- Comprehensive course of biomedical equipment maintenance (Irada organization for leadership training, Amman Jordan)
- Advance course in PIC Microcontrollers programming language at the Engineering Training Center.

GRANTS AND FUNDING

- **The Defense Advanced Research Projects Agency (DARPA)**, Proposal Number SSC-3547-00, **entitled:** "*Peripheral Interfaces with the Nervous System (PINS)*" (Oct 2011-2015)
- **National Institutes of Health (NIH)**, Grant 5R01NS32845-12, **entitled:** "Nerve reshaping for improved electrode selectivity" (2009-2011)
- **Deanship of research at JUST**, Grant 506/ 2018-20170392, **entitled:**" *Design of a portable device for rehabilitation of patients with poststroke muscle spasticity*" (2017-2019)
- **Deanship of research at JUST**, Grant 507, **entitled:**" *Elliptical Trainer Redesign to Promote Usability and Diversify Muscles Recruitment*" (2017-2019)
- **Deanship of research at JUST**, Grant 507, **entitled:**" *Restoring Movement in Paralyzed Limbs Using Nerve Stimulation: Acute Animal Trials*" (2020-2021)
- **Deanship of research at JUST**, Grant 507, **entitled:**" *EEG Monitoring for Epilepsy from the Ear Canal*" (2019-2020)
- **The Department of Biomedical Engineering**, Jordan University of science and technology. Full sponsorship toward M.S and PhD in biomedical engineering (2008-2013)
- **The Royal Medical Services**, Amman, Jordan. Full scholarship award for undergraduate studies (2003-2007).

AWARDS AND HONORS

- **King Abdulla Award for Distinguished Students**, for being ranked the first in the department of Biomedical Engineering-Class of 2007, Amman, Jordan
- **Graduate Studies Full scholarship for distinguished student**, Jordan University of science and technology, Irbid, JO (2008).
- **Undergraduate Studies Full scholarship for Distinguished Student**, Jordan University of science and technology, Irbid, JO (2003).
- **Undergraduate students honor list for excellent academic performance**, (2003-2007)
- **School of engineering honor list for excellent academic performance**, (2003-2007)

PUBLICATIONS

1. Naser Hamdi, **Yazan Dweiri**, Yousef Al-Abdallat “*A Practical and Feasible Control System for Bifunctional Myoelectric Hand Prostheses*”, Prosthetics and Orthotics International (2010) .
2. Ziad Alkurdi and **Yazan Dweiri**. “*A biomechanical assessment of isometric handgrip force and fatigue at different anatomical positions*”. Journal of Applied Biomechanics 26(2):123-33 (2010)
3. **Dweiri, Yazan M.**, Thomas Eggers, Grant McCallum, and Dominique M. Durand. “*Ultra-low noise miniaturized neural amplifier with hardware averaging.*” Journal of neural engineering 12, no. 4 (2015): 046024.
4. Brian Wodlinger, **Yazan Dweiri** and Dominique Durand, Book Chapter. Pages 203-214 Book title: Implantable Biomedical Microsystems: Design Principles and Applications Chapter 9: Bishops, Electrical Biosensors: Peripheral Nerve Sensors Published in 2015
5. **Yazan M. Dweiri**, Matthew A. Stone, Dustin J. Tyler, Grant A. McCallum, and Dominique M. Durand “*A Fabrication Method of High Contacts’ Density Flat Cuff Electrode for Interfacing with the Peripheral Nervous System*” Journal of visualized experiments. Accepted on Feb 2016.
6. Thomas Eggers, **Yazan Dweiri**, Grant McCallum, and Dominique M. Durand. “*Increasing ENG Bandwidth to Improve SNR in Chronic Recordings*” 36th annual international conference of the IEEE engineering in medicine and biology. 2014.
7. **Yazan Dweiri**, Thomas Eggers, Grant McCallum, and Dominique M. Durand. “*Selective Recording of Neural Activities Chronically with Cuff Electrode*” 36th annual international conference of the IEEE engineering in medicine and biology. 2014.
8. Thomas Eggers, **Yazan Dweiri**, Grant McCallum, and Dominique M. Durand. “*Selective, Chronic Peripheral Nerve Recordings via Cuff Electrodes*” 7th International IEEE EMBS Neural Engineering Conference April 2015
9. **Yazan M. Dweiri** and Dominique M. Durand. “*Very-Low Noise, Low-Power, 16-Channel Multiplexed, Digital and Implantable ENG Amplifier*” Neural interface conference 2012.
10. **Yazan M. Dweiri**, Thomas E. Eggers, Luis Gonzalez-Reyes, Joseph Drain, Grant A. McCallum, Dominique M. Durand “*Detection of Brain Signals From The Peripheral Nervous System*”. Proceedings of the IEEE 105.1 (2017): 50-65.
11. Thomas E. Eggers, **Yazan M. Dweiri**, Grant A. McCallum, Dominique M. Durand “*Real-time Model-Based Bayesian Signal Extraction Algorithm for Peripheral Nerves*”. Journal of Neural Engineering. 14(5):056009 Oct. 2017
12. Eggers, Thomas E., **Yazan M. Dweiri**, Grant A. McCallum, and Dominique M. Durand. “*Recovering motor activation with chronic peripheral nerve computer interface.*” Scientific reports 8, no. 1 (2018): 1-10.
13. Matthew D Johnson, **Yazan M Dweiri**, Jason Cornelius, Kingman P Strohl, Armin

Steffen, Maria Suurna, Ryan J Soose, Michael Coleman, John Rondoni, Dominique M Durand, andQuan Ni. *“Model-based analysis of implanted hypoglossal nerve stimulation for the treatment of obstructive sleep apnea” Sleep*, Volume 44, Issue Supplement_1, 2021

PATENTS

- Dominique M. Durand & **Yazan M. Dweiri** , *“Multichannel Ultra - Low Noise Amplifier”*
Patent No .: US 11,071,499 B2, Date of Patent Approval : Jul . 27 , 2021
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Important assumed roles and professional activities in the past five years:

- Served as a representative of the department of biomedical Engineering at the Engineering Faculty council at JUST 2017-2019
- Served as a representative of the faculty of Engineering at the JUST University council 2018-2019
- Invited keynote speaker of the Biomedical Engineering scientific day at JUST in 2019
- Invited keynote speaker in the IEEE Jordan Chapter annual meeting, 2018
- The head of the innovation committee at the center of excellence of innovative projects at JUST (2020-2021)
- Served as the Chairperson of BME track in Mosharaka International Conferences 2020
- Invited reviewer for several journals including the journal of neural engineering and IEEE