CURRICULUM VITA

Ala'a Hisham Mahmoud Alshubbak

Personal Information

Email:	alaa.shubbak@gmail.com alaa.alshubbak@gju.edu.jo
Date of Birth:	24th October 1986
Place of birth:	Amman, Jordanian
Gender:	Female

Current Position:

1st September 2011 – until present.	**Teacher Assistant and Researcher.** **School of Applied Technical Science/Mechatronics Engineering Department.** **German Jordanian University**. Operation Research and Optimization lab, Robotics System Lab (Robotino, KUKA), Automatic Control System lab, Machine Design Lab , Instrumentation and Measurement, Hydraulic and Pneumatic lab, Industrial and Automation lab, CAD/CAM lab.

Education:

M.Sc.	2014	Mechatronics Engineering, Jordan University of Science and Technology – Irbid, Jordan. (While working on German Jordanian University) Thesis topic: "Studying the effect of different illumination on the movement and controlling of soccer robots." - not published yet-
B.Sc.	2009	Mechatronics Engineering, University of Jordan – Amman, Jordan. Thesis topic : "Simulation of human on an escalator"
Secondary school	2005	The General Secondary Certificate , Pioneer Educational Schools – Amman, Jordan. Average: 91.9 excellent, "Scientific stream ".

Experience:

09.2010-06.2011	Teacher Assistant "Part Time" Mechatronics Engineering Department Jordan University of Science and Technology, Working on (instrumentation and measurement lab)

01.2010-05.2010	Technical Support and Sales Engineer. ICES (Integrated Control and Electrical Systems) Co.
9.2009 –12.2009	Teacher Assistant "Part Time" Electrical Engineering Department. University of Jordan Working on (Automatic control lab , Circuit and electronics lab mechatronics system design and instrumentation lab)
01.2009 –04.2009	Internship Design Substation Department. NEPCO (National Electric Power Company)

Computer and programming skills:

Computer vision tasks such as Object Detection ,Segmentation , Pose estimation,tracking.
Basic deep learning in MATLAB. Python, pytorch, mmdetection library for deep learning.
Python, tensorflow for artificial intelligent and Machine Learning.
Vrep (CoppeliaSim Edu) for robotics design.
Python, tensorflow for artificial intelligent and Machine Learning.
CPLEX and Optimization
Image Processing using MATLAB
Parallel computation using MATLAB
Z-printer technology (3D printer)
CATIA: CAD &CAM design and analysis software.
Embedded system & microcontroller programming using MPLAB
MATLAB (Scribe file ,Simulink , GUI):design and control systems
LABVIEW & Multisim Circuit Maker
Basic Java programming, Advanced C++
PLC and SCADA system and programming

Language skills:

Arabic "Mother language", English "IELTS, 6.5 ", Germany "B2.1"

International Certificates:

- AutoCAD professional certificate (ACP)
- GRE exam (Quantitative reasoning = 154)

Published Journal Paper:

- LEGO Mindstorms NXT for Elderly and Visually Impaired People In-need: A Platform. 2016 Published by: Technology and Health Care.
- Modelling and verification of the kinematics of passenger falls on escalators, Feb 21, 2012 Published by: SAGE.

Published Conference Paper:

- Smart Factory of the Future -More efficient, more flexible, faster and more sustainable. 2019 Published by: the 9th FDIBA Conference Sofia, Bulgaria, 28 – 29 November 2019.

Training Courses

March 2021	Deep Learning in Kaggel (python)
March 2021	Deep Learning using MatLab
June 2019- Sep 2019	Duetsche Sprache Kurs Carl Duisberg Center (CDC), Munich , Germany
June 2018	Erasmus+ training ON KUKA iiwa robot Fundamental Design, assembly and analysis.
Feb 2018	Solid Works training Udacity , online course
Dec 2017	AutoCAD Certified Professional (ACP)
Jun-Jul 2015	Train the trainer program, Germany Jordanian University , Funding by DAAD Control for steering system. Hochschule Heilbronn ,Heilbronn , Germany
Jan. 2015	LABVIEW (software and hardware) By National instrument supplier in Jordan
Nov.2014	Understanding Research Methods Coursera, online course
April.2012	Computer Science; Introduction to Artificial Intelligence Udacity , online course
Jan.2011	Quality Management Jordan Engineers Association
June.2010	Project Planning Primavera (level 1) Jordan Engineers Association
May.2009	ISO & Quality Management System University of Jordan
Sep.2008	Team Work Skills Queen Rania Center for Entrepreneurship
June.2008	Robotics Technical Workshop IEEE student branches certificate

Participated In

- **Pre-Reviewer in IEEE Access** for a topic related to object detection application using deep learning. (2021)
- **Gold medalist Certificate** on 12/2/2021 in winning first place in PADERO Nagoya 2021 Hackathon, for design a robotic platform for elderly people, Germany.
- The 7th Jordanian International electrical and electronics engineering conference (JIEEEC) on 17-18th May 2017 which hold in Amman, Jordan .
- Volunteer in Souriyat Across Borders , 1st Jan 2017
- Certificate of training in scratch coding course during refugee coding week during September 2016, for teaching coding basic to children and teens as a social and volunteer work.
- English Extensive Reading Research Course, from 31th August to 30th November 2015 for University of Cambridge.
- Volunteer in IKB academy in Jordan. 2014 (www.iknowbusiness.net).

- The fifth innovation forum, on February 17th 2013
- The 7th Jordanian International electrical and electronics engineering conference (JIEEEC) on 12-14 April 2011 which hold in Amman, Jordan.

Teaching and work experiences:

Teaching the following course & labs: Industrial Automation, AutoCAD, Instrumentation and Measurement, Control System, Operation Research, Hydraulic and Pneumatic systems, CATIA and Machine Design, Image Processing.
Established the following labs:
Machine Design lab using CATIA and Z-printer, Operation Research lab using Cplex, Industrial automation lab.
Different administrative works:
2015: working as technical support and procurement engineering for Tempus project.
2016: working with supply and tender department for inventory of engineering workshop in school of applied technical science.
2017: being a member in open day committee in school of applied technical science.
2018: being member in Administrative work committees and graduated project development committees in school of applied technical science

Research interest:

- Artificial intelligent, machine learning and reinforcement learning for dynamic engineering system such as mobile robot, autonomous system and energy protection and decision making system.
- Modelling and Simulation for Dynamic system
- Operation research and optimization.
- Implementation and optimization of electromechanical system.
- Applying the concepts of psychology and neuroscience to dynamic systems.
- Computer vision and virtual Reality.