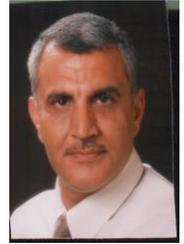# Curriculum Vitae

Name: Dr. Mohammed Mahdi Ali Al-Selman
Date of Birth: Baghdad 1959
Occupation: Assistant Professor Computer Control Engineering
E-Mail: moh_19592002@yahoo.co.uk
Specialization: Control & Systems Engineering
Martial Status: Married, Two Childs
Mobile: 00962796986257
Qualifications:

Degree	Specialization	Name of Institute	Date
Ph.D.	Real-Time Computer Control engineering	University Of Technology/Baghdad	1998
M.Sc.	Control and Systems Engineering	University Of Technology/Baghdad	1993
B.Sc.	Control and Systems Engineering	University Of Technology/Baghdad	1981

Professional Experience:

From - To	Job Title	Place	Work
2024-2025	Assistant Prof.	Philadelphia University Jordan	Head of Electrical Engineering and Communication Departments, Mechatronics Eng. Department, and Intelligent Systems Eng. Dept.
2022-2024	Assistant Prof.	Philadelphia University Jordan	Head of Electrical Engineering and Communication Departments,
2021-2022	Assistant Prof.	Philadelphia University Jordan	Dean Deputy and Head of Electrical Engineering and Communication Departments
2019-2020	Assistant Prof.	Philadelphia University Jordan	Instructor
2017-2019	Assistant Prof.	Philadelphia University Jordan	Head of Renewable Energy and Electrical Engineering Departments
2016-2017	Assistant Prof.	Philadelphia University Jordan	Head of Computer and electrical Engineering Departments
2013-2016	Assistant Prof.	Philadelphia University Jordan	Head of Computer Engineering Department
2012	Assistant Prof.	Philadelphia University Jordan	Computer Engineering Department
2005-2011	Assistant Prof.	Philadelphia University Jordan	Head of Computer Engineering Department
2002-2005	Assistant Prof.	Philadelphia University Jordan	Instructor, Project Coordinator, Faculty QA Committee Coordinator
2000-2002	Assistant Prof.	University Of Technology Sudan	Instructor
1999-2000	Assistant Prof.	University Of Technology/ Hadramout	Instructor
1998-1999	Assistant Prof.	University Of Technology/Baghdad	Instructor
1993-1997	Lecturer	University Of Technology/Baghdad	Instructor, Department Coordinator
1990-1993	Engineer	University Of Technology/Baghdad	Laboratories Supervisor

Teaching Experience:

For The Past 25 Years In Undergraduate & Postgraduate Courses (5-Years at University of Technology -Baghdad. 1-Year at Hadhramout-Yeman. 2-Years at Sudan University of Science & Technology, 22 years and till now at Faculty of Eng., Philadelphia University, Amman, Jordan.).

Main Subjects of Interest	Secondary Subjects of Interest
Process Control for industrial plants	Interfacing Circuit Design
Real-time computer control of industrial Plants	Microprocessor
Modeling and Simulation of Control Systems	Discrete Mathematics
Optimal Control	Logic Circuit
System Identification	Digital Signal Processing
Adaptive Control (MRAC & STR)	Advanced Mathematics
Modern Control Theory (MIMO & SISO)	Digital Techniques
PLC's	Computer Architecture
Robotics & Automation	Software Engineer
Mat lab control Applications	Pattern & Image Recognition
Instrumentation	C++ Programming Language
Advanced Engineering Mathematics (for Msc.)	Numerical Analysis
Neural Networks and Fuzzy Logic	Electrical Circuits
Advanced Control Theory (for Msc.)	Advanced Modeling and Simulation (for Msc.)

Consulting Services:

From - To	Place	Consultancy
1995-1998	Iraq-Baghdad	Engineer Consultancy Center

Publications & Awards:

Papers	Awards
25	1

Publications:

- Rule-Based Fuzzy Logic Controller Design Of Industrial Plants, *M.Sc Thesis, and Control & Computer Eng. Dept. University Of Technology –Baghdad – Iraq.*
- Design & Evaluation Of Fuzzy Logic Rule-Based Controller, *Eleventh Inter. Conf. On Applied Informatics Page No. (204-206) France-1993.*
- Applications of Fuzzy Logic Algorithm for Control of Industrial Plants, *First Iraqi Eng. Conf., 22-25 Nov., Baghdad-1994.*
- Self-Organizing Fuzzy Logic Controller, Design & Implementation, *CATAEE, 95 Conf., 21-23 May, Philadelphia University, Jordan-1995.*
- NeuroFuzzy Controller Design, PhD Thesis, *Control & Computer Eng. Dept. University Of Technology, 1998.*
- NeuroFuzzy System Design for Control Applications: - Part1: Theory & Design. Part2: Applications. *CATAEE, 99 Conf., 19-20 October, Philadelphia University, Jordan-1999.*
- A Hierarchical Neuro-Fuzzy MRAC of a Robot in Flexible Manufacturing Environment, *The International Arab Journal of Information Technology, July 2004, Volume 1, Number 2.*
- Design and Simulation of an Iterative Fuzzy Logic Controller (IFLC), *Asian Journal of Information Technology 5 (1):34-37, 2006*
- Simulation of Neurofuzzy Controller Design for Unstable and Non-linear Control Systems, *CEE-SECR 2009 program, Russia*
- Maximum Power Point Neuro-Fuzzy Tracker for Photovoltaic Arrays *applied,* 8th International Multi-Conference on Systems, Signals and Devices *2010.*

- Wireless Cellular Systems Performance Improvement Based on Neural Network, INTERNATIONAL JOURNAL OF COMMUNICATIONS, Issue 4, Volume 6, 2012

- GPRS-Based Remote Sensing and Teleoperation of a Mobile Robot, International MultiConference on Sensors, Circuits and Instrumentation Systems, Tunisia 2012.

- The Effects of Mos Layers on Sensing Properties of Mos Photo sensor Inte. Journal on smart sensing and Intelligent Systems Vol.6, No.3, June 2013.

- GPRS – Based Remote Sensing and Teleoperation of a Mobile Robot, International Multi-Conference on Sensors, Circuits and Instrumentation Systems, Germany 2013.

- Real-Time Monitoring and Intelligent Control for Greenhouses Based on Wireless Sensor Network, International Multi-Conference on Sensors, Circuits and Instrumentation Systems, Barcelona 2014.

- Design and Realization of a Multi-Robot System for Real-Time Sensing and Monitoring, ICST2014 conference, Liverpool, UK.

- Robotino Obstacle Avoidance Capability Using Infrared Sensors, 2015 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technology (AEECT), November 3-5, 2015.

- A Simulation Study of Multi-Disciplinary Position Control Methods of Robot Arm DC Motor, SSD16, March 2016, Germany pp. 489-493.

- Path Tracking Control of a Mobile Robot Using Fuzzy Logic, SSD16, March 2016, Germany, pp. 83-88.

- Obstacles Avoidance for Omnidirectional Mobile Robot Using Line Trajectory Adaptation, SSD16, March 2016, Germany, pp. 96-101.

- Efficiency Enhancement Based on Allocating Bizarre Peaks, Intr. Journal of Wireless & Mobile Networks (IJWMN) Vol.8, No.4, August 2016.

- Power Peaks Allocation based on Averaging – Adaptive Wavelet Transform, Intr. Journal of circuits, systems and Processing, Vol.10, 2016, pp:440-447, ISSN: 1998-4464.

- Safe Navigation and Target Recognition for a Mobile Robot Using Neural Networks, SSD17, March 2017, Morocco, pp. 705-712.

- GPRS-Based Remote Sensing and Teleoperation of a Mobile Robot. (journal-2018)

- Efficiency Enhancement Based on Allocating Bizarre Peaks, Intr, Journal of Wireless & Mobile Networks (IJWMN, Vol.8, No.4, August 2019

- Wheelchair Neuro Fuzzy Control and Tracking System Based on Voice Recognition, Sensors (Q1) 2020, 20, 2872

- Obstacles Avoidance for Mobile Robot Using Type-2 Fuzzy logic Controller, Robotics (Q1) , 2022, 11, 130

Administrative Experience:

- Head of Electrical Engineering and Communication Departments Faculty of Engineering Philadelphia University, Amman, Jordan (2021-). - Dean Deputy of Faculty of Engineering Philadelphia University, Amman, Jordan (2021-2022). - Head of Quality Assurance Committee on faculty level. - Member of Quality Assurance Council on University level. - Head of Quality Assurance Committee in Faculty of Engineering and Technology / Philadelphia University 2020-. - ABET committee supervisor and Self Study Report member in Electrical Engineering Department / Faculty of Engineering and Technology / Philadelphia University (2015-2018). ABET Accreditation was obtained in 2018/2019 cycle from initial visit.
- Head of Electrical Engineering and Renewable Engineering Departments Faculty of Engineering Philadelphia University, Amman, Jordan (2016- 2019). - Head of Computer and Electrical Engineering Departments Faculty of Engineering Philadelphia University, Amman, Jordan (2013- 2016). - Head of Computer Engineering Department Faculty of Engineering Philadelphia University, Amman, Jordan for six years (2005-2011)
- Quality Assurance Committee Coordinator of Faculty of Engineering Philadelphia University, Amman, Jordan (2005-2018). ABET coordinator committee – Faculty of Engineering.
- Member in many committees of Department and University levels (University Quality Assurance Committee) and Expert member in the Expert committee of Quality
- *Department Coordinator for 5 years at Control & Engineering Dept. / University of Technology-Iraq (1993-1998).*

M.Sc Dissertation Supervision At Sudan University Of Science & Technologyand Philadelphia University:

Model Reference Adaptive Control: Design & Implementation.
Neuro Controller Design Based on Winner-Take-All Criterion.
Structural & Functional NeuroFuzzy Controllers.
Image Processing via ANN's.
Level Controller Design Of Laboratory Scale Industrial Process.
Path Tracking Control Of A Mobile Robot Using Fuzzy logic
Obstacle avoidance of a Mobile Robot Using Linear Model Adaptive Control.
Safe Navigation and Target Recognition for a Mobile Robot Using Neural Networks
Obstacles Avoidance for Mobile Robot Using Type-2 Fuzzy Logic Controller

Prizes:

- ISESCO Best Research Prize- 1998.

Referees:

Name	Position	e-mail
1. Prof. Jassim Ghaeb	Faculty of engineering Philadelphia university- Amman-Jordan	jghaeb@gmail.com
2. Prof. Mohammed Bani Younis	Faculty of engineering Philadelphia university- Amman-Jordan	MBaniyounis@philadelphia.edu.jo

Signature: **Date: 8/10/2024**