

***C.V***

***Curriculum Vita***

**Dr. Marwa Taher Yousif Ali**

## **1. Personal Information**

**Name:** Marwa Taher yousif Ali  
**Nationality:** Egyptian  
**Religion:** Muslim  
**Marital status:** Divorced  
**Address:** Cairo, Egypt  
**Date of Birth:** 31/10/1979  
**Place of Birth:** Cairo, Egypt  
**Current Job:** Assistant Professor at Dept. Of Automatic Control,  
Tabbin Institute for Metallurgical Studies.  
Director of Technology Innovation Support Centre.

## **2. Contact Information**

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**E-mail:** [marwa\\_t\\_1979@yahoo.com](mailto:marwa_t_1979@yahoo.com)

## **3. Qualifications:**

- **PhD degree of “Computers Engineering”** – (Robotics) – 2013 –  
Faculty of Engineering - Helwan University - Egypt  
**Thesis title** “Motion Planning of Mobile Robots in Cluttered  
Environments”
- **MSc degree of “Electronics Engineering” - Programming of FPGA** –  
2006 - Faculty of Engineering - Helwan University - Egypt  
**Thesis title** “Design and Implementation of High Performance FPGA  
Based Floating-Point DSP Functions”
- **B.Sc degree of “Computers, Electronics & Communications”** -  
Specific  
Field: Computers Engineering – 2001- Faculty of Engineering –  
Helwan University - Egypt

**Project of graduation:** Smart Home (as an application of using Computer interface to protect a home from fire and stealing, and save the electricity)

**Degree of project:** Excellent

**General Field:** Communication, Computers and Electronics Engineering

**Specific Field:** Computers Engineering

#### **4. Career progression**

- Computers and electronics Engineer at Measurements and calibration lab (From 2002 to 2008).
- Teacher Assistant at Department of Automatic Control (From 2009 to 2013).
- Assistant Professor at Department of Automatic Control (From 2013 until now).
- Director of TISC (Technology Innovation Support Centre) from 2013 until now.
- Technical Supervisor of IT center from February 2021 until July 2022

**At Tabbin Institute for Metallurgical Studies – Cairo – Egypt.**

#### **5. Teaching Experience**

Teaching the following subjects for graduated studies at Tabbin Institute for Metallurgical Studies – Cairo – Egypt:

- Microcontroller
- Energy Management in Electrical Systems (includes Improvement of power factor, High efficiency lighting & High efficiency Motors)
- SCADA (Supervisory Control and Data Acquisition)
- DCS(Distributed Control System)
- Automation of Rolling Mill Process

## **6. Training Experience**

Training the following courses:

- IP Rights
- The IP ways to protect your invention
- How to patent drafting
- How to write a good proposal
- Computer skills for Rehabilitation of young graduates
- Embedded systems
- Distributed Control Systems (DCS)
- Supervisory control and data acquisition (SCADA)
- Robotics

## **7. Practical or Scientific experience**

- Electronic Cards Design & Maintenance.
- Computers Maintenance.
- Electronics, Electrical and Industrial Measurements.
- Calibration of electrical and industrial measuring equipment's.

## **8. Administrative Experience**

- Manager of TISC (Technology Innovation Support Centre) office.
- IPR awareness for researchers and inventors.
- Technical support for researches and inventors.
- Represent the TISC in many national conferences and Exhibitions (TISC won a prize from Academy of Scientific Research and Technology (ASRT) In recognition of the efforts.
- Participation in scientific councils and monitoring committees for postgraduate studies at the Institute.
- Participating in many conferences as:
  1. Co-operation Conference for between the industry and the scientific research (2014) to (2016)
  2. Mediterranean matchmaking Euro platform (2014)

3. Exhibition of international Cairo for innovation (2014) to (2017)

### **9. Experiences in the following fields:**

Computer Architecture	Microprocessor
Digital Signal Processing	C++
Computer Interface	Assembly
Digital Logic Design	Matlab
Microcontroller	Embedded System
VHDL	Robotics
Microsoft Office	FPGA
Solar Energy Systems	English

### **10. Scientific Activities:**

#### **❖ Attendance of scientific conferences**

- "Radio Science Conference" - Egypt
- "Sixth Scientific Student Conference" presents the latest inventions at the Helwan University – Cairo – Egypt - Guest House - April 2014
- "The First Forum Transfer of Innovation to the Market" at the Greek campus at the American University – Cairo – Egypt - May 2014
- The conference of cooperation between industry and scientific research 2-5 March 2014.

#### **❖ Attendance of Scientific Seminars**

- "Marketing and financing scientific research and projects and linking them to industry" Faculty of Science Helwan University - Cairo - Egypt - April 2014

- "How to evaluate ideas" at the Centre for Technological Innovation and Entrepreneurship (TIEC) in Smart Village - Cairo - Egypt - January 2015
- "Patents and Intellectual Property Protection Law" at the Agricultural Research Centre, Cairo, Egypt, January 2015
- "Clarivate Analytics formerly Thomson Reuters Analytics" workshop at the Scientific Research Academy, Cairo, Egypt, November 2017.

#### ❖ **Passing many training courses**

- "Introduction to Intellectual Property" in the Academy of Scientific Research and Technology – Cairo - Egypt
- "Solar Energy Systems" at the National Research Center – Cairo - Egypt - August 2015
- "Embedded Systems" – AMIT - Cairo – Egypt - 2014
- "VLSI" at the National Telecommunication Institute Cairo – Egypt - 2003
- "General Course on Intellectual Property" in Distance Learning at the World Intellectual Property Organization (WIPO) – Online - 2016
- Courses in English language – Berlitz – Cairo - Egypt

### **11. List of Publications:**

- [1] "High –Speed , Area efficient FPGA Based Floating Point Arithmetic Modules" JES Fac. of Eng., Univ. of Assiut, Vol.34, No. 4 , July 2006, and Proc. of the ICSES Conference, Sept. 06 ,Poland.
- [2] "Tracking of a Moving Target by Improved Potential Field Controller in Cluttered Environments", IJCSI International Journal of Computer Science Issues, Vol. 9, Issue 2, No 3, March 2012, pp(472-480).
- [3] "Improved Potential Field Controller for Obstacle Avoidance in Mobile Robots", 29th NATIONAL RADIO SCIENCE CONFERENCE (NRSC 2012) April 10 - 12, 2012.

- [4] "Tracking of Multi Moving Targets Using the Simplified Artificial Potential Field Controller", JOURNAL OF COMPUTER SCIENCE AND ENGINEERING, VOLUME 13, ISSUE 2, JUNE 2012, pp (1-9).
- [5] "Obstacle Avoidance with Virtual Sensor in Mobile Robot's Motion using the Advanced Potential Field Controller", International Journal of Computer Applications (0975 – 8887) Volume 53– No.4, September 2012, pp (9-14).
- [6] "A COMPARISON STUDY BETWEEN USING THE PSO ALGORITHM AND THE GA IN MOBILE ROBOT'S MOTION", International Journal of Information Technology, Control and Automation (IJITCA) Vol.3, No.1, January 2013, pp (1-10).
- [7] "Virtual Distance Sensor Information for Effective Obstacle Avoidance of Mobile Robots", JOURNAL OF COMPUTER SCIENCE AND ENGINEERING, VOLUME 17, ISSUE 1, JANUARY 2013, pp (11-15).
- [8] "Adaptive Controller Based PSO with Virtual sensor for Obstacle Avoidance in Dynamic Environments" accepted at NRSC 2014

## **12. References:**

<b>Name</b>	<b>Contact Information</b>
Prof. Dr. Taha Mattar	Director of Tabbin Institute for Metallurgical Studies <b>01001301230      tahamattar@yahoo.com</b>
Prof. Dr. Tarek Mahmoud Sami	Former Director of Tabbin Institute for Metallurgical Studies - Director of Technology Innovation and Commercialization Office <b>01279418760      sami_san@yahoo.com</b>
Prof. Dr. Yousry Barakat	Former Director of Tabbin Institute for Metallurgical Studies <b>01001225965      yfbarakat@hotmail.com</b>

Prof.Dr.Elsayed  
Mostafa Saad

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Engineering – Helwan University  
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