



# Adjunct Professor Khaled FOUDA

Professor, MENA Regional Director,  
PMP, ICP, CSM, MCT, SCJP, Network+, CBP,  
MCTS, MCAD, MCSA, MCSE, MCDBA, MCP

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## 1. Profile

I obtained my Ph.D. from Paris-Saclay University and Université de Versailles Saint-Quentin-en-Yvelines – France in 2017 in Robotics (In June 2020, **Paris-Saclay University ranked 14th in Shanghai Ranking's top 1000 universities in the world, five Nobel laureates**). My research interests include humanoids and service robots. I obtained my M.Sc. in Computer Engineering from The Arab Academy for Science & Technology & Maritime Transport in Egypt in 2014 and received my B.Sc. from Cairo University, Egypt in 2004 in Computer Engineering. My Ph.D. is accredited by the **Egyptian Supreme Council of Universities**. I am currently pursuing a Master of Business Administration at the Graduate School of Business, Arab Academy for Science, Technology & Maritime Transport.

### In the field of project management and IT management

My project management experience is based on almost **20 years** of experience. I have proven experience leading clients through **complex multifunctional, multi-phase, international business** initiatives. Managed **PCL 5+** projects (Project Classification Level with budget > \$5,000K). Managed **100+ very large** project profiles, either **Local or International** projects. Expert in **Virtual team delivery**, Regarding the PM certifications: I hold **PMP, Certified ScrumMaster®, ICAgile Certified Professional**. Regarding tools: I am **Microsoft Certified Technology Specialist in MS Project**, I am Expert in **C-Level interaction**, Managed **T&M/FP**. I am an **expert in project financial management**, managing projects with total budgets up to **\$155 Million**. Managed more than **15,000+ project Man-days**.

### In the field of consulting and teaching

Currently I am MENA Regional Director at Etqan-Tech, I was Adjunct Professor at German University in Cairo (GUC), Faculty of Media Engineering and Technology. I was Adjunct Professor at Arab Academy for Science & Technology & Maritime Transport (AASTMT), Computer Engineering Department. I was Senior Program Manager at aiXplain, I was Program Manager - PMO at Oracle Egypt, I was Regional Director & Member of the Board of Directors at Etqan-Tech S.A.E., I was founder and Managing Director at FodaDev L.L.C. Starting from Fall 2020, I was also Assistant Professor at University of Prince Edward Island hosted by Universities of Canada in Egypt and at the Canadian International College (CIC), Cairo campus of Cape Breton University (CBU) in Canada. I worked as a Specialized R&D Engineer at Dassault Systèmes – Vélizy-Villacoublay, France. I worked as a Senior IT Consultant at Arab Women Organization; League of Arab States, Project Management Consultant at Arab Administrative Development Organization - League of Arab States and Senior Services Management and Business Skills Consultant at Global Knowledge. Since 2011, worked as a Project Manager, and Focal Strategic Consultant at IBM Global Delivery Center for Egypt, Romania, Vietnam, China, Brazil, and Argentina at IBM World Trade Corporation, from 2005 to 2011. Before this position, I worked as an Embedded Systems Engineer. I also worked as a freelance instructor in many international training centers, governmental centers, institutes, universities, and colleges, and worked as a part-time lecturer at the Canadian International College (CIC) from 2007 to 2011. I am an internationally recognized expert in providing training, taught 4000+ hours of professionals, managers, leaders, and undergrads from different nationalities.

My experience is based on almost 26 years in the IT industry in different fields, I practiced the following activities: Project Management, Focal Strategic Consultant, Consultancy, Software and Hardware Support, Designing, Coding, Software Integrating, Technical Testing, Functional Testing, Software Infrastructure, Servers' Maintenance, Technical Documentation, introducing and presenting new technologies, conducting technical sessions.

### In the field of research and development

I published 17 technical papers in international conferences and highly reputable journals, 7 textbooks (English Version ISBN-13: 978-620-3-19627-6) translated to seven languages. In 2017, I participated in a patent in the National Institute of Industrial Property in France "Multidirectional Active Integrated Omni wheel Motor". Ref. No: FR3063453, Year: 2017. World Intellectual Property Organization:

<http://DrFouda.com>

[WO2018158445A1](#), European patent office: [EP3589499A1](#) In 2015, I devised a “Closed-form solution for direct geometric model for Stewart platform” which was unknown since 1965. Stewart platform is an essential mechanism for flight simulators. I also participated in designing, manufacturing, and controlling seven robots (tank mobile robot, holonomic mobile, humanoid, articulated arm, cartesian, construction, parallel robots). I patented “Apparatus to Generate Electricity from the Earth Gravity and Water Distillate”, registered at Academy of Scientific Research and Technology, Patent Office in 1996.

I hold several international certifications from **Harvard**, **Microsoft**, **Sun Microsystems**, Project Management Institute (**PMI**), International Consortium for Agile (**ICAgile**), **SCRUM ALLIANCE®**, **CompTIA**, **MathWorks®** and **IBTA** including Microsoft Certified Trainer, Project Manager Professional, ICAgile Certified Professional, Certified ScrumMaster®, Microsoft Certified Technology Specialist, Microsoft Certified System Engineer, and Microsoft Certified Application Developer. I have been a member in the Institute of Electrical and Electronics Engineers (IEEE) since 2001, Project Management Institute (PMI), IEEE Computer Society, IEEE Robotics and Automation Society, and (Institute of Internal Auditors (IIA).

## 2. Personal Information

 <b>Birth Date:</b> 5 <sup>th</sup> September. 1981	 <b>Birth City:</b> Giza - EGYPT
 <b>Nationality:</b> Egyptian	 <b>Marital status:</b> Married
 <b>Driving Licenses:</b> Egyptian	 <b>Valid Passport:</b> Available
 <b>Military service status:</b> Exempted	 <b>Religion:</b> Muslim Sonny Moderate
 <b>Residential Country:</b> Egypt	 <b>Children:</b> Daughter & Two children

## 3. Current Employment



2024 – Present **MENA Regional Director**

Etqan-Tech S.A.E. – Cairo, Egypt

*Responsibilities:* Evaluate business progress and create and institute strategies to accomplish the goals of the company.

## 4. Employment History



2025 **Adjunct Professor**  
 German University in Cairo (GUC) – Cairo, Egypt  
 Faculty of Media Engineering and Technology  
 Computer Science and Engineering Program.

*Responsibilities:* I conduct weekly teaching sessions, lectures, assign and grad projects, exercises and assess the progress of students, supervising undergraduate projects, and graduation projects, Grading the final and midterm exams.



2025 **Adjunct Professor**  
 Arab Academy for Science & Technology & Maritime Transport – Cairo, Egypt  
 College of Engineering and Technology  
 Computer Engineering Department

*Responsibilities:* I conduct weekly teaching sessions, lectures, assign and grad projects, exercises and assess the progress of students, supervising undergraduate projects, and graduation projects, Grading the final and midterm exams.



2024 **Senior Program Manager**  
 aiXplain, inc. – California, USA

*Responsibilities:* Collaborate with aiXplain AI research and development teams to understand technical nuances and translate them into compelling value propositions. Oversee the ongoing projects with the technical/third party suppliers including resources management, invoices, and deliverables. Collaborate

with industry partners, clients, and stakeholders to identify opportunities for AI-driven solutions, fostering strategic alliances and collaborations. Develop and oversee the execution of comprehensive technical programs aligned with the company's strategic goals. Oversee the management of timelines, ensuring efficient use of technical assets and maximization of innovation potential. Implement robust processes and methodologies to monitor and enhance the performance of AI projects, ensuring adherence to best practices in AI ethics and data governance.

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2021 – 2024 **Program Manager - PMO**  
Oracle Consulting Services – Cairo, Egypt

*Responsibilities:* As a Program Manager, my responsibilities encompassed overseeing the end-to-end execution of diverse programs, from conceptualization to delivery, ensuring alignment with organizational objectives and stakeholder expectations. I led cross-functional teams in defining project scopes, establishing timelines and budgets, and managing resources to achieve program milestones. Additionally, I facilitated effective communication and collaboration among stakeholders, identified and mitigated risks, and provided strategic guidance to drive program success. Through meticulous planning, monitoring, and adaptation, I consistently delivered programs that met or exceeded quality, schedule, and budgetary targets.

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2020 – 2021 **Regional Director & Member of the Board of Directors**

Etqan-Tech S.A.E. – Cairo, Egypt

*Responsibilities:* Evaluate business progress and create and institute strategies to accomplish the goals of the company.

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2020 – 2021 **Adjunct Assistant Professor**

UPEI - University of Prince Edward Island

Hosted by UoCanda - Universities of Canada in Egypt – New Administrative Capital - Egypt

Faculty of Mathematical and Computational Sciences



*Responsibilities:* I conduct weekly teaching sessions, lectures, assign and grad projects, exercises and assess the progress of students, supervising undergraduate projects, and graduation projects, Grading the final and midterm exams.

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2020 – 2021 **Adjunct Assistant Professor**

Cape Breton University

Hosted by CIC - Canadian International College - Cairo, Egypt

School Of Engineering - Major of Mechatronics



*Responsibilities:* I conduct weekly teaching sessions, lectures, assign and grad projects, exercises and assess the progress of students, supervising undergraduate projects, and graduation projects, Grading the final and midterm exams.

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2019 **Specialized R&D Engineer**

Dassault Systèmes – Vélizy-Villacoublay, France

*Responsibilities:* Satisfy our Users, Customers & Partners, Superior Technical Expertise by answering requests, monitoring usage, listening to feedbacks and communicate improvements.

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2011 –2013 **Founder & Managing Director**

FodaDev LLC. - Cairo, Egypt

*Responsibilities:* Formulating and successfully implementing Fodadev policy. Directing strategy towards the profitable growth and operation of Fodadev. Developing strategic operating plans that reflect the longer-term objectives and priorities established by the board. Putting in place adequate operational planning and financial control systems. Ensuring that the operating objectives and standards of performance are not only understood but owned by the management and other employees. Closely monitoring the operating and

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financial results against plans and budgets. Taking remedial action where necessary and informing the board of significant changes. Maintaining the operational performance of Fodadev. Monitoring the actions of the functional board directors. Assuming full accountability to the board for all Fodadev operations. Representing the company to major customers and professional associations. Building and maintaining an effective executive team.

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2007 –2011 **Adjunct University lecturer**  
CIC - Canadian International College - Cairo, Egypt  
School Of Business Technology - Major of Business Information System

*Responsibilities:* As a lecturer, I conduct weekly teaching sessions, lectures, assign, grad projects, exercises and assess the progress of students, supervising undergraduate projects, and graduation projects, Grading the final and midterm exams.

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2005 –2011 **Project Manager**  
IBM World Trade Corporation - Cairo, Egypt

*Responsibilities:* Project Management, Consultancy, Focal Strategic Consultancy for Egypt, Romania, Vietnam, China, Brazil, and Argentina, Team Leading, Software Support Designing, Coding, Software Integrating, Technical Testing, Functional Testing, Software Infrastructure, Servers' Maintenance, Technical Documenting, Introducing and Presenting new technologies, Conducting technical sessions.

*Positions History:* Focal Strategic Consultant, Mobilization Manager, Project Manager, IBM Rational Consultant, Embedded Software Engineer, Associate Software Engineer.

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2008 –2013 **Project Management and Soft Skills Instructor**  
EMAK International Academy - Cairo, Egypt & Kuwait.

*Responsibilities:* Teach the core business skills required for young Business Professionals, which covers these curriculums: Leadership, Business Communication, Business Etiquette, and Customer Services.

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2013 **Project Management Instructor**  
Egabi- Cairo, Egypt.

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2012 –2013 **Project Management Instructor**  
AMIDEAST- Cairo, Egypt, Tunisia

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2005 **Embedded Systems Developer**  
Software Engineering Competence Center – SECC at cooperation with KOICA (Korea International Cooperation Agency) - Cairo, Egypt  
*Responsibilities:* Project Coordinator, Hardware Designing, Producing and Presenting new technologies.

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2002 –2013 **Instructor**  
New Horizons Computer Learning Centers - Cairo, Egypt

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2013 **Project Management Instructor**  
Arab Administrative Development Organization - League of Arab States - Cairo, Egypt

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2011 **Senior IT Consultant**

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2011 **Senior Services Management and Business Skills Consultant**  
Global Knowledge - Cairo, Egypt



2004– 2005 **Computer Network Instructor**  
The Egyptian Cabinet, Information and Decision Support Center (IDSC), the Electronic Business Institute - Cairo, Egypt



1999– 2002 **Computer Science Instructor**  
Center for Advanced Software & Biomedical Engineering Consultation - CASBEC  
Cairo University - Cairo, Egypt  
*Responsibilities:* Instructing, Preparing materials and exams, Labs setup and infrastructure, Maintenance, Training centers establishment and management.

## 5. Educational Records

### Master of Business Administration - Investment Management

Sep. 2024 – Present



Graduate School of Business  
Arab Academy for Science & Technology & Maritime Transport  
GPA: 3.83 on a 4.0 scale  
Major: Investment Management

Egypt

### Ph.D. in Mechatronics, Robotics

Oct. 2013 – Dec. 2017



Laboratoire d'Ingénierie des Systèmes de Versailles  
Université de Versailles Saint-Quentin-en-Yvelines  
Université Paris Saclay  
Sciences and Technologies of Information and Communication  
In Specialty Robotics  
(Paris-Saclay University has been awarded the **14th world rank** in the 2020 Academic Ranking of World Universities (ARWU) ranking.)  
General Grade: **Excellent with Honor**

France

Thesis Title: "Testing Machine for Transtibial and Transfemoral Prosthesis"  
DOI: 10.13140/RG.2.2.28782.02881,

Oct. 2018

Accredited by the **Egyptian Supreme Council of Universities.**

### M.Sc. in Computer Engineering

Mar. 2008 – Apr. 2014



College of Engineering & Technology - Arab Academy for Science & Technology & Maritime Transport  
GPA: 3.42 on a 4.0 scale  
General Grade: **Excellent with Honor**

Egypt

Thesis Title: "Embedded System Architecture of Mobile Electronic Arabic Braille Panel for Reciting the Holy Qur'an (Rasm Al-'Uthmani)"  
DOI: 10.13140/RG.2.2.32137.47207

### B.Sc. in Computer Engineering

Sep 1998 – May 2004



Faculty of Engineering - Cairo University  
GPA: 3.28 on a 4.0 scale  
Project Thesis Title: "Controlling a Robot Arm Using Virtual Reality" (CRAUVR)  
Graduation Project Grade: **Distinction** General Grade: **Good**

Egypt

### School

Sep. 1984 – May 1998

La Rose De Lisieux Language School  
General Secondary Certificate Percent **98.2%** (best 1% student)

Egypt

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## 6. PhD Research Summary

The objective of this work is to build a testing machine for prosthesis. The machine should be able to reproduce the same dynamic and kinematics conditions applied on the prosthesis during normal use.

Numbers of amputations and causes of amputation were collected. Different types of prosthesis were classified according to the leg prosthesis per amputation height, passive, and active prosthesis, differentiated by the nature of their actuator. Most of the testing machines for the prosthesis were studied from the technological and capability prospective. Determining all the limitations of most existing testing machines, and the needs to develop a new machine to full fill these needs were developed.

Then we studied and analyzed the dynamics of human gait and run. The equations of motion by taking into consideration the masses and moments of inertia of skeletal segments. Most of the parameters of gait were extracted. In conclusion, we have the kinematic requirements of the human center of gravity to generate 6 DOF that the testing machine should carry out to emulate the normal human gait and run.

Three designs were proposed to implement the testing machine: Articulated robot arm, Cartesian manipulator, and Stewart Platform (SP). After implementing the three solutions we found the most suitable solution is the SP attached to it an artificial active hip. We have chosen hydraulic power as it is the most suitable actuation technique for our solution knowing the required actuation forces.

To help in controlling the SP motion, a novel Closed-form solution of direct Geometric model for planner and 6-6 Stewart Platform using the rotary sensors instead of liner sensors as wanted to the hydraulic actuators was developed. Sensitivity analysis was studied for that solution, and analytical calculation for computing in the workspace was also developed.

The conclusion from this testing machine is that we can create all the dynamics of the human body, i.e., walking or running or going up and downstairs. The developed solution can carry testing procedures for either passive or active prosthesis.

The Thesis was under supervision of **Prof. F.B. Ouezdou, Prof. Samer Alfayad.**

[more info.....](#)

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## 7. Master's Research Summary

This thesis concerns with reorganizing new Braille symbols to represent all the diacritics in the Arabic Quran, the aim of this study is building a system that translates the Quran verses to Qur'anic code, then extracting all similar patterns of variable lengths using enhanced (Lempel, Ziv, and Welch) LZW data Compression technique, creating an embedded search engine based on microcontroller that enable the user to select the soura, ayah, goz', hizb, page, or line to read. We will use the display control circuit due to complexity in showing sequence of Braille character, and (Multimedia Card) MMC card as a storage media. This embedded system can switch between Egyptian or Saudi Braille system.

The Thesis was under supervision of **Prof. Ahmed Fahmy, Prof Khaled Shehata, Dr. Hanady Essa**

[more info.....](#)

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## 8. Graduation Project

Title: "**Controlling a Robot Arm Using Virtual Reality**" (CRAUVR)

CRAUVR Is Your Hand Anywhere

where we design and execute robot control systems and most of the virtual reality parts such that robot arm simulates exactly the movement of the human arm and with remarkably high precision.

[more info.....](#)

### Applications

- Getting land mines from the desert remotely.
- Operate a remote Surgery between the capital and a submarine.
- Exploring the Egyptian pyramids.

### My responsibility

Project coordinator, software, and hardware designing, implementing, coding, and integrating, technical and functional testing, and technical documenting.

The project was under the supervision of **H.E. Prof. Ahmed M. Darwish**

Graduation Project Grade: **Distinction**

<http://DrFouda.com>

## Media

Presented this project in many TV shows on more than 9 satellite channels, e.g. Nile News Channel, Mehwar Channel, Nile Educational Channels and others. Many national and international newspapers published some articles about that project.

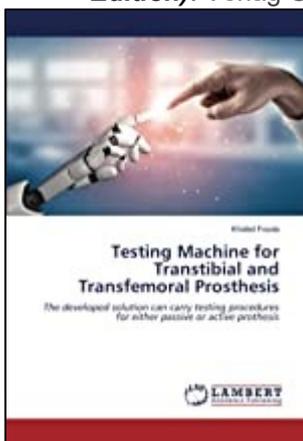
## 9. Patent Disclosure

- AlFayad Samer, Kardofaki Mohamed, Fouda Khaled “**Multidirectional Active Integrated Omni wheel Motor**”. Registered at National Institute of Industrial Property in France Ref. No: FR3063453, on 2<sup>nd</sup> March 2017. World Intellectual Property Organization: [WO2018158445A1](https://patentscope.wipo.int/search/en/patent/WO2018158445A1), European patent office: [EP3589499A1](https://patentscope.wipo.int/search/en/patent/EP3589499A1).
- Fouda Khaled “**Apparatus to Generate Electricity from the Earth Gravity and Distillate Water**”. Registered at Academy of Scientific Research and Technology, Patent Office on 31<sup>st</sup> July 1996.

## 10. Publications

### Books

- Fouda, K. (Dec 11, 2020) **Testing Machine for Transtibial and Transfemoral Prosthesis**. LAP LAMBERT Academic Publishing. ISBN-13: 978-620-3-19627-6
- Fouda, K. (May 31, 2021) **Máquina de Teste de Próteses Transtibiais e Transfemorais: A solução desenvolvida pode realizar procedimentos de teste tanto para próteses passivas como ativas (Portuguese Edition)**. Edições Nosso Conhecimento. ISBN-13: 978-6203738506
- Fouda, K. (May 28, 2021) **Maszyna do badań protez transtibialnych i transfemoralnych: Opracowane rozwiązanie może realizować procedury badawcze zarówno dla protez pasywnych jak i aktywnych (Polish Edition)**. Wydawnictwo Nasza Wiedza. ISBN-13: 978-6203738490
- Fouda, K. (May 28, 2021) **Machine d'essai pour les prothèses transtibiales et transfemorales: La solution développée permet de réaliser des procédures d'essai pour les prothèses passives ou actives. (French Edition)**. Editions Notre Savoir. ISBN- 978-6203738469
- Fouda, K. (May 29, 2021) **Testmachine voor Transtibiale en Transfemorale Prothesen: De ontwikkelde oplossing kan testprocedures uitvoeren voor zowel passieve als actieve prothesen (Dutch Edition)**. Uitgeverij Onze Kennis. ISBN-13: 978-6203738483
- Fouda, K. (May 28, 2021) **Macchina di prova per protesitranstibiali e transfemorali: La soluzione sviluppata può portare procedure di test sia per protesi passive che attive (Italian Edition)**. Edizioni Sapienza. ISBN-13: 978-6203738476
- Fouda, K. (May 28, 2021) **Prüfmaschine für Unterschenkel- und Oberschenkelprothesen: Die entwickelte Lösung kann Testverfahren für passive oder aktive Prothesen durchführen (German Edition)**. Verlag Unser Wissen. ISBN-13: 978-6203738445





## Journal Publications

- Moustafa A Fouz, Mohamad Kardofaki, Khaled Fouda, Samer Alfayad, Eric Dychus: **Child Lower Limb Exoskeleton: Sizing and Modeling**. *International Journal of Scientific and Engineering Research* 12/2016; 7(12):1585.
- Mohamad Kardofaki, Moustafa A Fouz, Khaled Fouda, Samer Alfayad, Eric Dychus: **Sizing and Actuation of Child Lower Limb Exoskeleton**. *International Journal of Materials, Mechanics and Manufacturing* 10/2018; 6(5):337.

## Pending Journal Publications

- KARDOFAKI Mohamad, FOUUDA Khaled, ALFAYAD Samer: **Design of an Active Integrated Omni Wheel Motor for Holonomic Mobile Platforms**.
- Khaled FOUUDA, Anas AMMOUNAH, Samer ALFAYAD, Fethi B. OUEZDOU: **Closed-form solution of Direct Geometric for Planar Stewart Platform**.
- Khaled FOUUDA, Anas AMMOUNAH, Samer ALFAYAD, Fethi B. OUEZDOU: **Analytical Workspace of Planar Stewart Platform**.
- Khaled FOUUDA, Anas AMMOUNAH, Samer ALFAYAD, Fethi B. OUEZDOU: **Closed-form solution of Direct Geometric for 6 DOF Stewart Platform**.
- Samer Alfayad, Khaled Fouda, Ahmad Tayba: **An Integrated Hydraulic Humanoid Robot Arm - Part I: Kinematic Structure, Modeling & Performances Analysis**
- Samer Alfayad, Fouda, Khaled., Ahmad Tayba: **An Integrated Humanoid Hydraulic Robot Arm - Part II: Prototype Design & Experimental Results**

## Conference Proceedings

- Khaled M.S. Foda, Ahmed Fahmy, Khaled Shehata, Hanady Saleh: **A Qur'anic Code for Representing the Holy Qur'an (Rasm Al-Uthmani)**. 2013 *Taibah University International Conference on Advances in Information Technology for the Holy Quran and Its Sciences*; 12/2013, DOI:10.1109/NOORIC.2013.67
- Khaled M.S. Foda, Mohamed H. Wahdan, Khaled A. Al-Ameri, Ahmed M. Darwish: **Controlling a robot arm using exoskeleton for land-mines disposal**. *Computer Engineering & Systems*, 2007. *ICCES '07. International Conference on*; 12/2007, DOI:10.1109/ICCES.2007.4447020
- Khaled Fouda, Ahmad Tayba, Samer Alfayad, Fethi Ben Ouezdou: **A Novel Compact Electrohydraulic Rotary Actuator for Elbow Joint used in Humanoid Robot: ROMEO**. *National Days of Manipulation Multi-Scale National Days of Humanoid Robotics*; 06/2015

## Research Posters

- Abdelrahman Mohamed, Ahmed Samir, Essam Ahmed, Khaled Essam, MennaAllah Gamal, Mina Kamal, Radwa Hesham, Zeinab Ali, Dr. Khalid Fouda, Dr. Nourhan Zayed: **3D construction printer**. 07/2021 *The 2021 International Telecommunications Conference (ITC-Egypt'2021)*. DOI: 10.13140/RG.2.2.32534.88643
- Dr. Samer AlFayad, Khaled Fouda, Mohamed Kardovaki, Ahmad Tayba, Moustafa Fouz, Mohamed Tahoun, Ahmed Ibrahim, Anas Ammounah, Mohamad El Asswad, Nahla Tabti: **Mohamed Bin Zayed International Robotics Challenge (MBZIRC)**. 2016; *Institute for Control and Decision of the IDEX Paris Saclay. iCODE Final Congress*; 05/2016, iCODE.2016. DOI: 10.13140/RG.2.2.30459.75049
- Dr. Samer AlFayad, Khaled Fouda, Ahmad Tayba: **Design a new Hydraulic Humanoid Arm for HYDROiD**. 2016; *Institute for Control and Decision of the IDEX Paris Saclay. iCODE Final Congress*; 05/2016, iCODE.2016
- Dr. Samer AlFayad, Khaled Fouda, Mohamed Kardovaki, Ahmad Tayba, Moustafa Fouz, Mohamed Tahoun, Ahmed Ibrahim, Mohamad El Asswad: **HOPALALA - Safe and Low-Cost Educational Open Platform for**

**Humanoid Robot.** 2016; *Institute for Control and Decision of the Idex Paris Saclay. iCODE Final Congress;* 05/2016, iCODE.2016. DOI:10.13140/RG.2.2.29830.60486

- Khaled Foda, Khaled Al-Ameri, Mohamed Wahdan, Dr. Ahmed Darwish: **CRAUVR - Controlling a Robot Arm Using Virtual Reality.** 2004; *Cairo University Computer Engineering Graduation Day;* 06/2004

## Accounts

- **ORCID iD:** 0000-0002-3470-7157
- **ResearchGate:** Saturday, 06 September 2025

**RG Score:** 2      **Total Research Interest:** 80.7      **Citations:** 9      **Recommendations:** 7      **Reads:** 22,646

- **Google Scholar:** Sunday, 31 December 2023

**Citations:** 11

**h-index:** 2

## 11. Experience

**Robotics:** I have participated in designing and manufacturing, assembling many robots. Either mobile or fixed robots.

**Project Management:** I have managed many successful projects in different areas, and managed projects of total budget of \$155 Million.

**Providing Training:** (Taught more than 3578 teaching hours, at 28 international training centers, governmental centers, universities, and colleges.

**Manage Computer Training Centers:** I have been member of the board of management of Resala training centers, Interviewing and Evaluating more than 200 instructor and employee.

**Automating Portfolio Management:** I have worked in deploying IBM® Rational® Portfolio Manager in IBM Cairo Technology Development Centre.

**Telematics:** I have worked on the CERT-IBM telematics project, in what is described by Information Week as the largest telematics deal in history of budget \$125 Million.

**Embedded Systems for Automotive:** I have worked on a joint project between IBM and Valeo.

**Computer Networks** (Design, Installation, and Administration)

**Lab Establishment:** I have participated in the establishment of two labs, electronic and hydraulic labs aimed at helping in development of robots.

## 12. Robotics & Mechatronics Experiences

[Watch](#)

### [Demos](#)

I have participated in designing and manufacturing, assembling many robots. Either mobile or fixed robots. During my PhD, I participated in the following robots:

1. **Delta Robots,** I have designed manufactured, assembled, tested, industrial 4D delta robot. Calculated workspace analytically, with two smart conveyers, image processing system, Controlled pneumatic suction system.
2. **3D construction printer:** I have co-supervised this project; 3D Construction Printing is one of the most promising developments of today. 3D Concrete printing results in a low cost and high-speed construction method and allows building objects of virtually any size, without compromising printing resolution or speed little is known. In addition, by implementing our project we can build homes and shelters to save the homeless people faster. Homes take months to be completed in a traditional way but by 3D printing it will take a few days.
3. **HYDROiD:** I have participated in electronic hardware and software development of the HYDROiD arm & head. Participated in creating many demos.
4. **Hobalala:** Safe and Low-Cost Educational Open Platform for Humanoid Robot, it can be customized from the mechanical, electrical, sensors, and programming perspectives. It consists of 25 DOF.
5. **Romeo-2:** In this research project, we are presenting new design principle of the humanoid robot's arm, which is mixing the electric actuators with the hydraulic technology. In ROMEO, one arm will be completely actuated by electric motors which are extremely fast but has limited torque, and on the other arm, the elbow only will be actuated by compact hydraulic system which has very high torque capabilities.
6. **Holonomic Mobile base:** The robot architecture is consisting of 1- Three active holonomic wheel units. (Patent Pending) • Three 3000 W high compact BLDC motors. • Three 48V Lithium batteries. • Three brushless DC motor controllers. • Three Electro-Hydraulic braking systems. • Three Fenders. 2- Three electric stabilizer legs. 3- High accuracy laser distance meter & Autofocus camera. 4- Main controller unit. 5- Portable computer. 6- Colour detector array. 7- Cooling system. 8- Safety laser scanner. 9- Emergency Stop buttons.

The UGV's specifications; 120 Km/hr. the maximum speed and 135 cm diameter. The stability, power efficiency, manoeuvrability, customizability in dimension, good autonomy, high payload are the main specifications.

7. **6 DOF Articulated Robot Arm:** It is a 6-degree-of-freedom high dexterity electric manipulator that is ideally suited for a use on UGV. The high-performance actuators and carbon fiber structure provide a strong light weight arm with the power to complete a wide variety of tasks. Each actuator consists of Robodrive Brushless DC servo motor, Harmonic drive gear box, an extremely high precision rotary position sensor, torque sensor, and electromagnetic brake unit. However, it is 6 DOF but it is still light weight.
8. **Cartesian Robot manipulator:** This Cartesian manipulator consists of 4 DOF; base azimuth, x, y, z translation. X, Y, Z are linear actuators with zero backlash motorized ball screw mechanism. The manipulator also has the battery and 4 stepper motor drivers. This mechanism is characterized by very high precision, and effectiveness.
9. **Smart Gripper V1, V2:** The gripper is responsible for picking up the correct tool from the panel and grip it while rotating it.
10. **LCSMSA30 & LCSMSA70:** Low-Cost Safe Modular Servo Actuators, it consists of Power Electronics Modules, Current sensor, DC motor, Gearbox, Force sensor, volt sensor, Microcontroller, Network, Position sensor. It can be speed/position/torque control.

I have participated in "**Controlling a Robot Arm Using Virtual Reality**" where we designed and executed robot control systems and most of the virtual reality parts such that robot arm simulates exactly the movement of the human arm and with extremely high precision. This project has many applications and from the most important ones are the following: Removing the land mines from the western desert by controlling the robot arm remotely, where the user is in a totally safe place, far away from any danger and controls the robot which will enter the mines fields to extracted without explosion. If any mine exploded suddenly as expected from an iron mine being exposed to the rain and to the heat of the desert sun for more than 50 years, it will explode in a cheap robot that costs 700 EGP. We can say that we saved human's lives or humans who is possibly lose a part of his body with 700 EGP ONLY.



## 13. International Robotics Competitions

Sep 2015 – Mar 2017 **Mohamed Bin Zayed International Robotics Challenge (MBZIRC) 2017**

I have participated in MBZIRC-2017 (Abu Dhabi) under Paris-Saclay University which was ranked as 9/143 all over the world. My role is **System Architect**.

For more information: <http://www.mbzirc.com/>

[more info.....](#)

## 14. Teaching and Academic Experience

- Internationally recognized expert in providing training.
- Taught about **4000+** Hours for **academic** and **non- academic** courses.
- Microsoft Certified Trainer since **2002**
- As a **lecturer**, I conduct weekly teaching sessions, lectures, and assign and mark grad projects, exercises and assess the progress of students.
- Supervised **162 undergraduate projects**, and **6 graduation projects**, two of them won international contests in Computer Engineering and Industry.

**Worked as freelance computer instructor since Winter 1999 in the following international training centers, governmental centers, institutes, universities, and colleges:**

1. German University in Cairo (GUC)
2. Arab Academy for Science & Technology & Maritime Transport, Computer Engineering Department.
3. Wahda Bank, Libya.
4. Central Bank of Libya, Benghazi.
5. University of Prince Edward Island hosted by Universities of Canada in Egypt.
6. Canadian International College (CIC), Cairo campus of Cape Breton University (CBU) Nova Scotia, Canada. School of Business, Information Management Department
7. Imparando (United Kingdom)
8. Oman Medical Specialty Board
9. Amideast (Tunisia)
10. Arab Administration Development Organization
11. Amideast (Egypt)
12. Toshiba Elaraby (Egypt)
13. Sodic (Egypt)
14. Egabi Learn
15. SQS Software Quality Systems (Egypt)
16. Americana (Egypt)
17. Industrial Modernization Centre (IMC) (Head Quarter, Heliopolis, and Alex Branches)
18. Global Knowledge Cairo, Riyadh
19. Vodafone Egypt, Head office, Mokattam
20. Egyptian Banking Institute, Central Bank of Egypt
21. Hands-on Management Consulting
22. Mohamed Abdulmohsin Al-Kharafi & sons W.L.L Kuwait - Head Office
23. EMAK International Academy
24. New Horizons® Computer Learning Centers, Cairo, And Mansourah branch (MCTEC Microsoft Certified Technical Educational Center, CIW Certified Internet Webmaster, ORACLE® Approved Educational Center, CompTIA Certified Educational Center)
25. Marsa Alam International Airport
26. Fayoum University
27. Electronic Business Institute (EBI), Information and Decision Support Centre (IDSC), The Cabinet
28. Computer Engineering Department, Cairo University
29. CASBEC (Center for Advanced Software and Biomedical Engineering Consultations in Faculty of Engineering, Cairo University)
30. Main Computer Labs of Faculty of Engineering, Cairo University
31. Faculty of Computer Science, Cairo University
32. Resala Charity Community, Faculty of Engineering, Cairo University
33. Scientific Computation Center, Cairo University
34. EGYBYTE

**Managed and delivered the following courses:**

- Inventory Management System.
- Procurement Management System.
- Tender Management System.
- Internal Auditing System.
- Contract Management.
- CRISC Certified in Risk and Information Systems Control.
- Project Management Workshop.
- Electric Circuit.
- Robotics Level 1.
- IT Project Management.
- Microsoft® Project 2007, 2010
- ITIL® Service Management Foundation
  - Financial Management
  - Services Portfolio Management
  - Demand Management
  - Services Level Management
  - Services Catalogue Management
  - Supplier Management
  - Availability Management
  - Capacity Management
  - Services Continuity Management
- Presentation Skills
- Train the Trainer.
- Change Management
- Exam Preparation Course for Project Management Professional (PMP®)
  - Project Scope Management
  - Project Time Management

- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management

- Project Procurement Management
- Project Integration Management
- Project Framework Management
- Project Risk Management
- Project Management Fundamental

- Business Leadership Series
- Business Etiquette Series
- Customer Service Series
- Business Communication Series
- Introduction to XML
- Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure, Course number 2279 (MCSE 2003)
- Implementing and Supporting Microsoft Windows XP Professional Course number 2272 (MCSE 2003)
- CompTIA A+ Certification – Core Hardware
- Introduction to Computers and Windows
- Computer Hardware and Maintenance
- Pascal language
- Advanced C++ and Object-Oriented Programming
- Fall 2025 – German University in Cairo GUC
  - Course name: Introduction to Communication Networks
  - Course code: CSEN503
- Spring 2025 – Arab Academy for Science & Technology & Maritime Transport.
  - Course name: Programming Fundamentals and Problem Solving
  - Course code: ECE1101
- Spring 2025 – Arab Academy for Science & Technology & Maritime Transport.
  - Course name: Applied Programming
  - Course code: ECE2102
- Spring 2025 – Arab Academy for Science & Technology & Maritime Transport.
  - Course name: Introduction to Microprocessors
  - Course code: CC411
- Fall 2020 – Canadian International College
  - Course name: Embedded Systems
  - Course code: ELE 413
- Fall 2020 – University of Prince Edward Island hosted by Universities of Canada in Egypt
  - Course name: Computer Organization and Architecture
  - Course code: CS 2520
- Spring 2007, Summer 2007, Spring 2008, Summer 2008, Spring 2009, Summer 2009, Spring 2010, Summer 2010 and Spring 2011 - Canadian International College
  - Course name: Object Oriented Programming Using Java
  - Course Code: BTEC 316
- Fall 2007, and Fall 2008 - Canadian International College
  - Course name: Visual Basic.NET 2003, 2005
  - Course code: BTEC 311
- Spring 2008, and Spring 2009 - Canadian International College
  - Course name: PC Hardware and Maintenance
  - Course code: BTEC 105

### Alumni - Theses Supervised - Graduation Theses

- July 2021 Khaled Moawed, MennaAllah Mohamed, Mina Fawzi, Radwa AbdelGawad, Zeinab Mohamed, Abdelrahman Anwar, Ahmed Samir, Essam Hassan. **3D Construction Printer**. Canadian International College – Mechatronics & Electronics and communication Department. I am co-supervisor with Dr. Nourhan Zayed. This Project won funds from Information Technology Industry Development Agency (ITIDA).
- April 2009 Hend Ahmed, Maha Mahib, Rana Gamal, Passant Yousef, Yasmin Serag, Youmna Shaker. **Mobile Point of Sales** (Won the best project in 2009) - Canadian International College – Business Technology Department.
- April 2009 Dalia Fouda, Bouthina Al-Moussa, Dalia Mina. **Automating Recruitment System** (Won the Second-best project in 2009) - Canadian International College – Business Technology Department.
- April 2009 Ayman Farouk, Maher Al-Macdesy, Moatz Gendia, Shady Awad, Tareq Nazeem. **Automating Ticket Online Reservation System** (Won the Third best project in 2009) - Canadian International College – Business Technology Department.

### I trained employees or students from more than 120 Company or Organization in different fields:

- Charity
- Telecommunications
- Military
- Constructions
- Tourism
- Petroleum, and Petrochemical Fields
- Information Technology
- Airports
- Banking
- Automotive
- Internet services Providers
- Satellites
- Universities and Training Providers
- Exporting and Importing

- Many Industries (Medicine, Marble, Paper, Plastics, Crystal, ....)

## 15. International Certificates

### MathWorks

24 October 2020

MATLAB Onramp

### Scrum Alliance



29 June 2020

Certified ScrumMaster®

CSM

[Verify](#)  
Certificant ID: 001087798

### The International Consortium for Agile (ICAgile)



9 June 2020

ICAgile Certified Professional

ICP

[Verify](#)  
242-18917-02df458a-9dfe-4edd-bf66-3711490c3c3b

### Dassault Systemes

September 2019

CATIA – Brand Essentials

August 2019

DELMIA – 3DLean – Articulated

October 2019

CATIA – Electric engineering – Certified Specialist  
Dassault Systemes

### Global Knowledge

June 2011

Active Leadership

### Project Management Institute



15 June 2009

Project Management Professional

PMP

[Verify](#)  
PMP ID: 1270239



02 June 2024

Generative AI Overview for Project Managers



07 June 2024

Data Landscape of GenAI for Project Managers

### Sun Microsystems



11 March 2006

Sun Certified Java Programmer  
(for Java™ 2 Platform 1.4)  
Certification ID#: SUN247637

Oracle Testing ID : I00120922  
OC2456690

SCJP

### CompTIA



[Verify](#)  
CompTIA ID: COMP001003593215

**IBTA - International Business Training Association**



April 2008

**Certified Business Communication Professional**

CBP

**EASYSPEAKING**

June 2019

CEFR: B2

**Microsoft**

MCP Number: 2701025

02 September 2010	<b>Microsoft Certified Technology Specialist (Microsoft Office Project 2007, Managing Projects)</b> Certification Number: A763- 9332	MCTS
29 April 2003	<b>Microsoft Certified Application Developer (Microsoft®. Net)</b> Certification Number: A763-9320	MCAD
19 January 2003	<b>Microsoft Certified Systems Administrator (Microsoft® Windows® 2000)</b> Certification Number: A763-9319	MCSA
21 November 2002	<b>Microsoft Certified Trainer</b>	MCT
21 November 2002	<b>Microsoft Certified Systems Engineer (Microsoft® Windows® 2000)</b> Certification Number: A763-9315	MCSE
21 November 2002	<b>Microsoft Certified Database Administrator (Microsoft® SQL Server™ 2000)</b> Certification Number: A763-9313	MCDBA
05 May 2002	<b>Microsoft Certified Professional</b> Certification Number: A763-9309	MCP



[more info.....](#)

**16. Professional Memberships**

- **IEEE** (Institute of Electrical and Electronics Engineers) since 2001 Member ID: 41364219
- **PMI** (Project Management Institute) since 2008 Member ID:1102513
- **IIA** (Institute of Internal Auditors) since 2025 GAN: 3693256
- **IEEE Computer Society** since 2001
- **IEEE Robotics and Automation Society** since 2005
- **IEEE Communication Society** since 2011
- **Agile Club (AC)** since 2020
- **Scrum Alliance** since 2020 Member ID: 1087798
- **Egyptian Syndicate of Engineers (ESE)** since 2004 Member ID: 2/5208148/2004/1



## 17. Previous Projects

1. Managing "**Implementation of HippoSoft® Budgeting & Planning Suite Project**" for the Central Bank of Libya - Benghazi (November 2025 – present).
2. Managing "**Implementation of Elephant Enterprise Assets Management (EAM) Project**" for the Central Bank of Libya - Benghazi (November 2025 – present).
3. Managing "**Eagle Audit System Project**" for Wahda bank - Benghazi (September 2024 – present).
4. Managing "**Shark-Contracts Management Project**" for Wahda bank - Benghazi (September 2024 – present).
5. Managed "**Eagle Audit System Project**" for the Central Bank of Libya - Benghazi (November 2024 – September 2025).
6. Managed "**Shark-Contracts Management Project**" for the Central Bank of Libya- Benghazi (November 2024 – September 2025).
7. Designed, simulated, manufactured, assembled, tested "**4 DOF Delta Robot**" (December 2020- present).
8. During my work at Oracle, I managed 35 national confidential & international projects with a budget of multi-millions of dollars in the following sectors: **governmental, public, military, petroleum, telecom, central banking, security, and fintech**, including Building infrastructure projects, data centers, networking engineering (July 2021- April 2024).
9. Co-supervised "**3D Construction Printer**" (October 2020- July 2021)
10. Managing "**Utopia- University Management System**" Using Oracle Technology (January 2021- December 2021)
11. Managed "**Enterprise Data Quality (EDQ) for Petroleum Development Oman (PDO)**" Using Oracle Technology (September 2020 - January 2021).
12. Co-supervised "**3D Construction Printer**" (October 2020 – Present).
13. Developed Project "**Encrypted Voucher Number Generator**" (September 2020 – October 2020).
14. Managing Project "**iTeach**" Using Oracle Technology (June 2020 – November 2020)
15. Participated in designed and implemented "**Huge 6-6 Hydraulic Stewart Platform**" (September 2013 – November 2017)
16. "**Simulated and Controlling Stewart Platform**" using Simscape Multibody™, (January 2016 – December 2017)
17. Participated in designing and implementing "**Very Powerful Holonomic Mobile Robot Base**". Used Three active holonomic wheel units. (Patent Pending), Three 3000 W high compact BLDC motors, three 48 V Lithium batteries, three brushless DC motor controllers, Three Electro-Hydraulic braking systems, Three Fenders, three electric stabilizer legs, High accuracy laser distance meter & Autofocus camera, Main controller unit, Portable computer, Cooling system, Safety laser scanner, and emergency Stop buttons (August 2012 – April 2014)
18. Participated in designing and implementing "**6 DOF Articulated Modular Robot Manipulator**". Used TQ-RoboDrive Servo BLDC motor, zero-backlash Harmonic Drive® Strain Wave Gears, ROBA®-servostop® electromagnetic brake, and RLS - Aksim™ rotary absolute encoder (September 2015 – March 2017)
19. Participated in designing and implementing "**Two Fingers Robot Gripper V2**" based on Robotiq 2-Finger Adaptive Robot Gripper (September 2015 – March 2017)
20. Participated in designing and implementing "**Driver for TQ-RoboDrive Motors (BLDC motor)**" used in hydraulic pump, Articulated Robot Manipulator, and Child Exoskeleton for Lower Limb. (January 2014 – March 2017)
21. Participated in designing and implementing "**Active Integrated Omni Wheel Motor for Holonomic Mobile Platforms**". (October 2013 – March 2017)
22. Participated in designing and implementing "**4 DOF Cartesian Modular Robot Manipulator 1m x 0.7m x 1.8m + 360° Azimuth base**". Based on RK Rose + Krieger products (September 2015 – March 2017)
23. Participated in designing and implementing "**All the Image Processing Algorithms Used in MBZIRC-2017**" Including OCR, Length detection algorithm, Side detection algorithm, Valve's angle detection algorithm, and Adjusting and fitting algorithm (September 2015 – March 2017)
24. Participated in designing and implementing "**Safe and Low-Cost Educational Open Platform for Humanoid Robot: HOBALALA**". Hopalala Robot is first safe and low-cost educational open platform humanoid robot, that is suitable for Research purposes, Educational Affairs, and even for entertainment. Its designed to extend the field of robotics developers' community, NOW, each one can customize Hopalala to match his own flavor. (November 2014- October 2016)
25. Participated in designing and implementing "**Low-Cost Safe Modular Servo Actuators: LCSMSA30 & LCSMSA70**". Using DC Motor, Gear Box, Power Electronics, Microcontroller, Network, Position Sensor, Current, Voltage, Force Sensors, and Speed/Position/torque control (November 2014- October 2016)
26. Participated in collecting and analysis the "**Human Gate Cycle**" using Vicon system (January 2013)
27. Participated in designing and implementing "**A Novel Compact Electrohydraulic Rotary Actuator for Elbow Joint used in Humanoid Robot: ROMEO**". This Project with collaboration with Aldebaran (Now SoftBank Robotics), LIRMM, CEA, and LISV.
28. Participated in designing and implementing "**The Demos for Hydraulic Humanoid Arm for HYDROiD to show its ability to cut copper tubes, drill holes in thick wood, and using a hummer**".
29. Designed and implement "**Driver for Moog Servo Valve Direct-Operated for Analog Signals Type: 30 and 35 Series**" (November 2013- January 2013)
30. Designed and implemented the hardware and firmware for "**Electronic Braille Quraan**" Project (August 2012 – April 2014)

31. Participated in designing and managing "**Automating LEONi's Requisition Process**" (January 2011- December 2012)
32. Participated in designing and managing "**Automating LEONi's Employees System**" (January 2011- December 2012)
33. Designed and implemented "**Quality Assurance System logger for WHS Egypt**" (August 2012 - November 2012)
34. Managed "**Commercial Registration Agency**" Project (January 2011- February 2011)
35. Participating in designing and managing a "**Automating LEONi's recruitment process**" Project (November 2010- December 2012)
36. Participated in designing and implementing a "**WHS Egypt for Plastics web site**" Project (October 2010 - May 2011)
37. Participated in designing and implementing a "**AI Fouad for Plastics web site**" Project (May 2010 - June 2010)
38. Managed "**League of Arab States - Electronic Content Management**" Project (February 2010 – March 2010)
39. Technically managed "**IBM Title Real Estate Management System**" Project (January 2009 - January 2010)
40. Supervised "**Automating Ticket Online Reservation System**" Project (October 2008 - May 2009).
41. Supervised "**Mobile Point of Sales**" Project (October 2008 - May 2009).
42. Supervised "**Automating Recruitment System**" Project (October 2008 - May 2009)
43. Managed "**Annotation Project**" (April 2008)
44. Participated in "**Deploying IBM ® Rational ® Portfolio Manager as a Project Management Tool for the Cairo- Technical Development Centre**" (March 2008 - March 2008)
45. Participated in "**Deploying IBM ® Rational ® Portfolio Manager as a Time Tracking Tool for the Cairo- Technical Development Centre**" (February 2007 - March 2008)
46. Participated in designing and implementing: Firmware and control circuit of a "**Exterior Building Painting Robot**" Using Embedded C, Keil µVision, Atmel microcontroller 89C52 (May 2007).
47. Achieved designing and implementing a "**C-Box Explorer - Diagnostic Tool**" Using Eclipse Plug-in SDK 3.2 (October 2006).
48. I was one of the team members that develop "**CERT Falcon**" Project (April 2006 - September 2007)
49. Produced three packages "**Spectro, Colour Matching, and Wash Fastness**" Using MATLAB® 6.5 (October 2005).
50. Achieved a software game, which was "**Snake**" in C language (October 2005)
51. Achieved analyze and designing the website of "**National Institute of Standards**" for NIS (July 2005).
52. Achieved designing and implementing hardware project, which was a "**Controlling the Speed of DC Motor**" using C language, PWM (Pulse Width Modulation) in HCS12 Microcontroller (June 2005)
53. Achieved designing and implementing a "**Dyes Analyzer and Dyes Synthesis Systems**" (September 2004)
54. Participated in designing and implementing hardware project, which was "**Acquisition ISA Card**" using C language. It was an interfacing system for digitizing five analog signals Interfaced with ISA Bus (May 2004)
55. Participated in Presenting a "**Net Map**" project Used to discover and draw the network using Microsoft® Windows® Utilities (May 2004)
56. Participated in designing and implementing a "**Securing the Attendance System**" Using Java SDK, Java Card™ Platform and Open Card Framework (May 2004)
57. Participated in designing and implementing a "**PASCAL Compiler**" Using Parser Generator & Microsoft® Visual C++® 6 (May 2004)
58. Participated in testing a "**JPEG Encoder System**" Using Xilinx® WebPACK 4.2 (December 2003)
59. Participated in designing and implementing a "**Simple Network Card**" Using Altera® Max 10 (October 2003)
60. Participated in designing and implementing an "**Optical Character Recognition**" Using MATLAB® 6.5 Neural Network and Image Processing toolbox (December 2003)
61. Achieved designing and implementing Signal Processing project, which was an "**Voice Recognition**" Using MATLAB® 6.5 (August 2003)
62. Participated in designing "**Distributed Operating System Simulator**" using C++ (May 2003)
63. Achieved designing and implementing hardware project, which was an "**AM Transmitter**" (January 2003)
64. Participated in designing "**Operating System Simulator**" using Java (January 2003)
65. Achieved designing and implementing "**PDP-11 Microprocessor Emulator**" using Altera® Max 10 (November 2002)
66. Achieved designing and implementing an "Interfacing Card of Data Acquisition System" for "**Tripology and Spare Parts Center**", Faculty of Engineering, Cairo University (Oct. 2001)
67. Achieved designing and implementing a Signal processing "**Audio Equalizer**" using MATLAB® 5.3 (April 2001)
68. Participated in designing and implementing a "**Frequency Meter**". It computes the frequency of any input signal (April 2001)
69. Participated in database project for "**School System**" using ORACLE® (April 2001)
70. Participated in a software automation project. It was for automating a "**Faculty Control System**" beginning from the analysis phase till the design one. (April 2001)
71. Participated in hardware project, which was "**Robot 2000**" using Assembly language embedded in C language program. It was an interfacing system for controlling the robot arm to play Tic-Tack-Toe interfaced with parallel port. (November 2000)
72. Achieved a software game, which was "**Minesweeper-like**" in Pascal Language (September 1999)

73. Achieved a software game, which was “PAC MAN –like” in Pascal Language (August 1996).

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## 18. Technical Interests

- Mechatronics
- Digital and Analog Electronics
- Robotics and Automation
- Embedded Systems
- Computer Architecture
- Micro Controllers
- Computer Interfacing & Microprocessors
- Computer Networks
- Logic Circuits design
- Computer Graphics
- Digital Signal Processing
- System Analysis

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## 19. Invited Talks

### Presentations covering the following topics.

1. Enterprise Assets Management (EAM) for Central Banking
2. Budgeting & Planning Suite for Central Banking
3. Internal Auditing for Central Banking
4. Contract Management for Central Banking
5. Risk and Information System Control
6. Computer Architecture
7. PCB Design and Fabrication
8. Introduction to Gyroscope
9. Introduction to Thevenin's Theorem
10. Full business plan for Rescue Robots
11. Testing Machine for Transtibial and Transfemoral Prosthesis
12. Embedded System Architecture of Mobile Electronic Arabic Braille Panel for Reciting the Holly Qur'an (Rasm Al-'Uthmani)
13. A Novel Compact Electrohydraulic Rotary Actuator for Elbow Joint used in Humanoid Robot: ROMEO
14. The Importance of soft skills in building a new Egypt.
15. Real Time Systems for Automotive
16. Comparison of Ethical Hacking Techniques and their countermeasures
17. Software Testing Techniques
18. Introducing Cost Estimation techniques - COCOMO II Model
19. Introducing Data Acquisition System
20. Introducing Business Leadership
21. Introducing Business Etiquette
22. Introducing Customer Service
23. Introducing Business Communication
24. Detection of the Fetal Heartbeats During Labor (DSP Application)
25. Introduction to Perl
26. Controlling a Robot Arm Using Exoskeleton for Land-Mines Disposal
27. Project Management Using IBM® Rational® Portfolio Manager.
28. Time Tracking Using IBM® Rational® Portfolio Manager.
29. Algorithms and Data Structures Using C
30. Introduction to Microsoft® Visual Basic® .NET
31. An Improved Genetic Algorithm of Optimum Path Planning for Mobile Robots
32. Object Oriented Programming Using Java
33. Introduction to Robotics
34. QNX System Architecture (Real Time Operating System)
35. GPS (Global Positioning System)
36. Introducing IEEE (Institute of Electrical and Electronics Engineers)
37. Dead Lock Recovery
38. ECU (Electronic Control Unit)
39. Introduction to VHDL (VHSIC Hardware Description Language)
40. Converting 2D to 3D (Image Processing Techniques)
41. DHCP (Dynamic Host Configuration Protocol)
42. Hardware Intelligent Agent
43. Introduction to Microcontrollers
44. Controlling a Robot Arm Using Virtual Reality (Graduation Project Proposal Presentation)
45. Intelligent Recommender System
46. Petrojet Hierarchy
47. Computer Hardware and Maintenance
48. School Automation

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## 20. Personal Skills

- Excellent communication & presentation skills
- A generalist rather than specialist
- Fast learner
- Excellent analytical skills
- Impressive public speaker
- Dynamic with large capacity for work
- Broad scope of personal interests
- Goal oriented
- Ambitious, Confident and Persuasive
- Well organized
- Interested in social-technical activities.
- Sound decision maker

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## 21. Linguistic Skills

- **Arabic** (Mother Tongue)
- **English** CEF: B2 (Common European Framework)

## 22. Technical Skills

### Agile Project Management

Jira

### Waterfall Project Management

Microsoft® Project 2003, 2010, 2021, 365, IBM® Rational® Portfolio Manager V7.0.4.4

### Product Lifecycle Management

CATIA™, SOLIDWORKS™, DELMIA™

### Programming Languages

C/C++, Microsoft® Visual C++® 6, Embedded C, HTML, XML, Java™ 2 Platform 1.4, Assembly, VHDL (VHSIC Hardware Description Language), Pascal, LISP, PROLOG, Microsoft® Visual Basic® .NET, Perl, Python, YAML, JSON

### IDEs (Integrated Development Environment)

Visual Studio 2022, Eclipse SDK 3.2.0, WSDD (Webshere Studio Device Developer), QNX Momentics Development Suite, Borland C++, Turbo Pascal, Microsoft® Development Environment 2003, JCreator 3.0 LE, Glass fish esb 2.2

### Cross Compilers

Metrowerks CodeWarrior™ IDE, Keil µVision, mikroC

### Microcontrollers, Microprocessors, and Digital Signal Processors

Atmel 8051 Family, Esp. AT89C4051, AT89C52, Motorola HCS12(X) Family, Esp. MC9S12E128, Intel 80(x)86 Family, Texas Instrument TMS320 Family, PIC18F (X), PIC16F (X), STM32

### Internet of Things (IOT) Microcontroller

ESP32.

### AI Vesion Computer

NVIDIA Jetson Nano Developer Kit.

### Database Engines

Oracle®, Microsoft® SQL Server™ 2000, Microsoft® ACCESS 2000, DBASE IV.

### Data Quality

Oracle Enterprise Data Quality 12.2.1 (EDQ)

### Server Operating Systems (Using and Administration)

Microsoft® Windows® Server 2003, Microsoft® Windows® 2000 Server, Microsoft® Windows® 2000 Advanced Server, Microsoft® Windows® 2000 Data Centre Server, Microsoft® Windows® NT Server 4.0, Debian Linux, Red Hat Enterprise Linux 3.2, 3.8, and 4.4 (Using Only)

### Client Operation System

Microsoft® Windows® 11, 10, 8, 7, Vista, XP, 2000 Professional, NT Workstation 4.0, 9X, 3.11, Ubuntu 18, DOS.

### Real Time Operating Systems (RTOS)

QNX Ver. 4.24, QNX Neutrino Ver. 6.0.1, QNX Neutrino ver. 6.3.

### Robot Operating System (ROS)

ROS Melodic Morenia, ROS Noetic Ninjemys

### Simulators

Matlab®, Electronic Workbench, MultiSIM® 2002 Package, ALTERA® Max+plus II 10, Xilinx® WebPACK 4.2.

### Source Code Analyzers

PC-Lint™ C/C++ V8.0., QAC Source Code Analyser 6.0.1.

### Automated Business Workflow Tools

Joget, Workflow Designer V2.0.1

### Word Processor

LaTeX, Microsoft Word.

### Software Configuration Management Tools

CVS (Concurrent Versions System).

### Automated Build Tools

Ant, Cruise Control.

### Software Testing

IBM® Rational® Test RealTime, JUnit.

### Content Management System

WordPress

### Printed Circuit Board Design Software

ORCAD® Release 9, EAGLE

### Servlet Container

Apache Tomcat

### Customer Relationship Management (CRM)

Oracle® Siebel 8.0

## Graphics

AutoCAD® 14, Adobe® Photoshop® 7.0 me, Adobe® Photoshop® 5.0

## Robotics kits

Lego Mindstorms NXT 2.0, OWI007 Robotic Arm, THYMIO 2

## Modeling Tools

Proteus, Orcad, Google sketch up

## Web Authoring

Parallax, Microsoft® FrontPage® 2003, Xara Menu Maker 1.0, Microsoft® FrontPage® XP, Xara webStyle 4, Microsoft® FrontPage® 2000, Microsoft® Expression® Web 3, Macromedia Flash, Macromedia Dreamweaver, Microsoft® Expression® Web 4,

## Miscellaneous

Visio® 5, Parser Generator 2, Microsoft® Office

# 23. Training Courses (Ordered Chronologically)

## Soft Skills Courses

1. **Influencing Others** (LinkedIn Learning, Year 2022)
2. **Leading and Working in Teams** (LinkedIn Learning, Year 2022)
3. **Communicating Across Cultures** (LinkedIn Learning, Year 2022)
4. **Change Management** (Harvard ManageMentor, Year 2022)
5. **Negotiating** (Harvard ManageMentor, Year 2022)
6. **Persuading Others** (Harvard ManageMentor, Year 2022)
7. **Presenting to Senior Executives** (LinkedIn Learning, Year 2022)
8. **Handling C-Level Conversations and how to WOW your SteerCo** (LinkedIn Learning, Year 2022)
9. **Decision Making** (Harvard ManageMentor, Year 2022)
10. **Strategic Thinking** (Harvard ManageMentor, Year 2022)
11. **Anti-Corruption Training** (Oracle Egypt, Year 2022)
12. **Unconscious Bias** (Oracle Egypt, Year 2022)
13. **Insider Trading** (Oracle Egypt, Year 2022)
14. **Conflicts of Interest Training** (Oracle Egypt, Year 2022)
15. **Effective Listening** (Lynda.com, Year 2019)
16. **Working with Upset Customers** (Lynda.com, Year 2019)
17. **Business Communication – Certified Business Professional program (CBP)** (EMAK International Academy, Year 2008)
18. **كيف تحفظ القرآن في 56 يوم** (Awareness Corporation, Year 2007)
19. **أفكار ابداعية لتحفيظ القرآن الكريم** (Awareness Corporation, Year 2007)
20. **How to Speed Read with Accuracy** (Buzan Centres, Year 2005)
21. **How to improve your Memory** (Buzan Centres, Year 2005)
22. **Train the Trainer** (Resala Training center, Year 2003)
23. **Train the Trainer** (New Horizons® Computer Learning Centers, Year 2002)

## My Harvard Badges



Strategic Thinking



Decision Making



Persuading Others



Negotiating



Change Management

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## Management Courses

1. **Technical Analysis Management** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
2. **Assets & Portfolio Management** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
3. **Managerial Accounting** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
4. **Investment Management** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
5. **Marketing Management** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
6. **Human Resources Management** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)

7. **Managerial Finance** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
8. **Operation Management** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
9. **Managerial Economics** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
10. **Financial Accounting and Reporting** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
11. **Contemporary Management** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
12. **Applied Statistics** (Arab Academy for Science & Technology & Maritime Transport, Year 2025)
13. **Data Landscape of GenAI for Project Managers** (PMI, Year 2024)
14. **Generative AI Overview for Project Managers** (PMI, Year 2024)
15. **The Basics of Scrum** (PMI, Year 2024)
16. **Consulting Bid Bootcamp (CBB) Contracting at Oracle** (Oracle Learning, Year 2022)
17. **Global Standard Operating Procedures (GSOP) Awareness** (2021) (Oracle Learning, Year 2022)
18. **Global Standard Operating Procedures (GSOP) Awareness Training - Module - GSOP Introduction** (Oracle Learning, Year 2022)
19. **GSOP Awareness Test** (Oracle Learning, Year 2022)
20. **PM Excellence - Senior Project Manager/Director – track** (Oracle Learning, Year 2022)
21. **Learning Program Management** (LinkedIn Learning, Year 2022)
22. **Complex Project Tips and Tricks** (LinkedIn Learning, Year 2022)
23. **Program Management Professional “PgMP”** (Business Park, Online-live, Year 2021)
24. **Certified ScrumMaster Workshop “CSM”** (VIDSCOLA DWC, Online-live, Year 2020)
25. **ICAgile's fundamentals** (VIDSCOLA DWC, Online-live, Year 2020)
26. **Project Management: Solving common Project Problems** (Lynda.com, Year 2019)
27. **Human Resources Management in Practice – For Beginners** (Udemy, Year 2019)
28. **Project Management Fundamentals (PM10G)** (IBM World Trade Corporation, Egypt Branch, Year 2009)
29. **Contracting for Project Managers (PM12G)** (IBM World Trade Corporation, Egypt Branch, Year 2009)
30. **Getting Started Managing Projects in IBM Rational Portfolio Manager (PM45G)** (IBM World Trade Corporation, Egypt Branch, Year 2009)
31. **Getting Started Using IBM Rational Portfolio Manager for Project Team Members (PM48G)** (IBM World Trade Corporation, Egypt Branch, Year 2009)
32. **Managing Scope Exceptions in IBM Rational Portfolio Manager (PM49G)** (IBM World Trade Corporation, Egypt Branch, Year 2009)
33. **Creating and Managing Project Schedules in IBM Rational Portfolio Manager (PM50G)** (IBM World Trade Corporation, Egypt Branch, Year 2009)
34. **Project Management Orientation (PM54G)** (IBM World Trade Corporation, Egypt Branch, Year 2009)
35. **Financial Management for Project Managers (PM63G)** (IBM World Trade Corporation, Egypt Branch, Year 2009)
36. **Creating and Tailoring Project Management Systems (PM76G)** (IBM World Trade Corporation, Egypt Branch, Year 2009)
37. **Understanding WWPMM** (IBM World Trade Corporation, Egypt Branch, Year 2009)
38. **Exam Preparation Course for Project Management Professional (PMP®)** (EMAK International Academy, Year 2008)
39. **Software Project Management** (Software Engineering Competence Centre, Ministry of Communication & Information Technology, Smart Village, Year 2007)

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### Computer Courses (Non-academic Courses)

1. **Oracle Software Security Assurance (OSSA)** (Oracle Egypt, Year 2021)
2. **CATIA – Brand Essentials** (Dassault Systemes, France, Year 2019)
3. **DELMIA – 3DLean – Articulated** (Dassault Systemes, France, Year 2019)
4. **CATIA – Electric Engineering – Articulated** (Dassault Systemes, France, Year 2019)
5. **Become a Professional Python Programmer** (Udemy, 2018)
6. **Linux for Beginners** (Udemy, 2018)
7. **Fundamentals of WSDD ver. 5.7.1 (WebSphere Studio Device Developer), OSGi (Open Services Gateway initiative)** (IBM World Trade Corporation, Middle East, Year 2006)
8. **Developing Embedded Applications for Automotive Industry** (IBM World Trade Corporation, Egypt Branch, Year 2005)
9. **VHDL (VHSIC Hardware Description Language)** (Software Engineering Competence Centre, Ministry of Communication & Information Technology, Smart Village, Year 2005)
10. **Digital Signal Processing Using MATLAB® 6.5** (High Tech Center Faculty of Engineering, Cairo University, Year 2003)
11. **Neural Networks Using MATLAB® 6.5** (High Tech Center Faculty of Engineering, Cairo University, Year 2003)
12. **Fuzzy Logic Using MATLAB® 6.5** (High Tech Center Faculty of Engineering, Cairo University, Year 2003)
13. **Adobe® Photoshop® 7.0 me** (CASBEC Faculty of Engineering, Cairo University, Year 2003)

14. **Automatic Control Using MATLAB® 6.5** (High Tech Center Faculty of Engineering, Cairo University, Year 2003)
15. **Programming with MATLAB® 6.5** (High Tech Center Faculty of engineering, Cairo University, Year 2003)
16. **Administrating a Microsoft® SQL Server™ 2000 Database** (New Horizons® Computer Learning Centers, Year 2002)
17. **Querying Microsoft® SQL Server™ 2000 with Transact-SQL** (New Horizons® Computer Learning Centers, Year 2002)
18. **Designing a Microsoft® Windows® 2000 Directory Services Infrastructure** (New Horizons® Computer Learning Centers, Year 2002)
19. **Implementing and Administration Microsoft® Windows® 2000 Directory Services** (New Horizons® Computer Learning Centers, Year 2002)
20. **Implementing Microsoft® Windows® 2000 Network Infrastructure** (New Horizons® Computer Learning Centers, Year 2002)
21. **Implementing Microsoft® Windows® 2000 Professional and Server** (New Horizons® Computer Learning Centers, Year 2002)
22. **Microsoft® Windows® 2000 Network and Operating System Essentials** (New Horizons® Computer Learning Centers, Year 2002)
23. **Digital Signal Processing** (High Tech Center Faculty of engineering, Cairo University, Year 2001)
24. **Microsoft® Visual C++® 6** (CASBEC Faculty of Engineering, Cairo University, Year 2000)
25. **PCB Fabrication and ORCAD® Release 9** (CASBEC Faculty of Engineering, Cairo University, Year 2000)
26. **Micro Controllers (8051 Family, Esp. AT89C4051)** (CASBEC Faculty of Engineering, Cairo University, Year 2000)
27. **Computer Interfacing** (CASBEC Faculty of Engineering, Cairo University, Year 2000)
28. **Computer Hardware** (CASBEC Faculty of Engineering, Cairo University, Year 1999)
29. **Digital & Analog Electronics** (CASBEC Faculty of Engineering, Cairo University, Year 1999)
30. **Geographical Information System (GIS) using Geomedia®.** (CASBEC Faculty of engineering, Cairo University, Year 1999)
31. **Microsoft® Access 97** (Institute of statistical research & studies, Cairo University, Year 1995)
32. **Using DB IV** (Institute of Statistical Research & Studies, Cairo University, Year 1995).
33. **Pascal language** (Institute of statistical research & Studies, Cairo University, Year 1995)
34. **C++ language** (Institute of Statistical Research & Studies, Cairo University, Year 1995)
35. **Microsoft® Windows® 3.11** (Institute of statistical research & studies, Cairo University, Year 1995)
36. **Introduction and DOS** (Institute of statistical research & studies, Cairo University, Year 1994)

[more info.....](#)

## Languages Courses

### French - Centre des cours de langue de Mounira

1. **Découverte 1**, 2008

### English - British Council

1. **Level Seven Level, Conversation Programme**, 2005
2. **ielts Academic Level, ielts programme**, 2005

### Germany

**German language, Grundkrus G1/2 (intensiv)**, 1996

[more info.....](#)

## 24. Volunteering & Charity Work

### IEEE (Institute of Electrical and Electronics Engineers) Activities and Responsibilities

- Cairo University, Computer Engineering Department Chapter Chair.
- IEEE Active Member.
- Participated in organizing SBC (Student Branch Congress) 2002 and GOLD (Graduates of Last Decade) 2002.
- Participated in preparing "Industry University Link Program in Egypt".

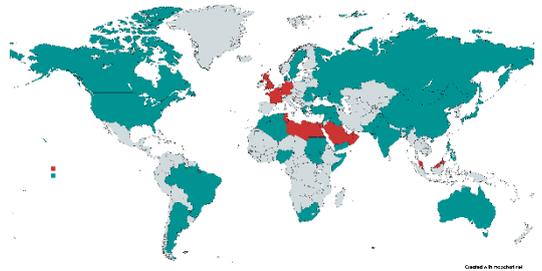
### Resala Training Center

- I was Management board member for RTC for many years.
- Delivered many courses in RTC.

## 25. Travel Experience

Travelled to **France, United Kingdom, Germany, Belgium, Tunisia, United Arab Emirates, Kuwait, Qatar, Saudi Arabia, Oman, Libya, and Malaysia.**

I have worked with many nationalities from: **United States, Canada, Russia, Greece, Pakistan, Syria, Lebanon, Nigeria, Somalia, Turkey, Romania, South Africa, Algeria, Morocco, Sudan, India, Iraq, Yamen, China, South Korea, Argentina, Brazeel, Philbin, Denmark and Japan.**



## 26. Hobbies

- Horse Riding
- Shooting
- Travelling
- Reading
- Museums
- History
- Photography
- Charity
- Watching documentary movies

## 27. Honors & Recognition Awards

Mar 2017	Certificate of Participation in MBZIRC-2017 from Khalifa University
Jan 2017	Certificate of the final selection phase, only qualified team from France to participate in MBZIRC-2017 from Paris-Saclay University and University of Versailles Saint-Quentin-en-Yvelines
Dec 2011	<b>Honor Plaque</b> from Shorouk Academy 2011 (for giving a speech around "The Importance of soft skills in building a new Egypt" and was dedicated from the President of the Shorouk Academy <i>Prof Mohamed Shouman</i> )
Dec 2011	<b>Honor Plaque</b> from Egyptian Russian University 2011 (for giving a speech around "The Importance of soft skills in building a new Egypt" and was dedicated from the President of the ERU <i>Prof Sherif M.Helmy</i> )
Nov 2009	He has been nominated for appearing in the 2010 Edition " <b>Who's Who in the World®</b> " 2009 (Founded in 1974 by Albert Nelson Marquis)
Apr 2009	<b>Canadian International College Students Honor Plaque</b> (for supervising their graduation projects and win the first three positions)
Jul 2008	<b>Outstanding Performance</b> from EMAK International Academy for outstanding performance in instructing Certified Business Professional (CBP)
Feb 2008	He has also been nominated to appear in <b>Great Minds of 21st Century by American Biographical Institute (ABI)</b> . (a major reference directory including just 1,000 of the world's top thinkers and intellectuals)
Oct 2004	<b>Certificate of Appreciation</b> by <b>The Egyptian Cabinet, Information and Decision Support Center, the Electronic Business Institute</b> (for training the first MCSE track)
Nov 2002	<b>Microsoft Certificate of Excellence</b> by <b>Bill Gates</b>
May 2002	<b>IEEE Egyptian Student Branches</b> (for participating in organizing IEEE Student Branch Congress 2002 & Graduates of Last Decade Congress 2002)
Oct 1995	<b>La Rose De Lisieux Language School</b> (Exemplary Student)

## 28. References

- **H.E. Prof. Ahmed M. Darwish**, Minister of State for Administrative Development, Professor in Computer Engineering Department, Faculty of Engineering, Cairo University (e-mail: darwish@ieee.org, web site: [www.amdarwish.com](http://www.amdarwish.com))
- **Prof. Nevin M. Darwish**, Chairman of Computer Engineering Department, Faculty of Engineering, Cairo University (e-mail: ndarwish@eng.cu.edu.eg)
- **H.E. Prof. Yasser Alayli**, Professor at Paris-Saclay University, Scientific Director (email: yasser.alayli@lisv.uvsq.fr)

## 29. Social Network



facebook.com/khaledmsfoda



instagram.com/khaledmsfoda

 [linkedin.com/in/khaledfoda](https://www.linkedin.com/in/khaledfoda)       [researchgate.net/Khaled\\_Foda](https://www.researchgate.net/Khaled_Foda)  
 [twitter.com/kfoda](https://twitter.com/kfoda)       [plus.google.com/107557059760364822738](https://plus.google.com/107557059760364822738)  
 [youtube.com/kmsfoda](https://www.youtube.com/kmsfoda)       <https://orcid.org/0000-0002-3470-7157>  
 <https://github.com/kfouda>  
 [https://scholar.google.com/citations?user=uz\\_4MJ4AAAAJ&hl=en](https://scholar.google.com/citations?user=uz_4MJ4AAAAJ&hl=en)  
 <https://www.projectmanagement.com/profile/DrKhaledFouda>

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## 30. Additionally



**Save my contact.**

Last updated on Saturday, January 17, 2026, Photocopies of all the documents and all the original certificates are available upon request or kindly see it on my web site

<http://drfouda.com/>

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