# **CURRICULUM VITAE**

1. Name: Fayrouz AbdEl Rahman Allam

2. Date of birth: 9/2/19783. Nationality: Egyptian

4. Phone Number: 01003833712

5. E-mail: <u>f\_allam2008@yahoo.com</u>,

6. Education& Training:

Institution [ Date from - Date to ]	Degree(s) or Diploma(s) obtained:	
Faculty of Engineering, Helwan Univ. (2007-2014)	PhD in Computer Engineering (Automatic control)  "Closed loop control system for blood glucose regulation for type-1 diabetic patients"	
Faculty of Engineering, Helwan Univ. (2001-2006)	MSc. In digital signal processing "Comparative study on super-resolution of images"	
Faculty of Engineering, Helwan Univ. (1995-2000)	BSc. of Communication And Electronics Engineering	
Hackathon, Pepsico, March, 2022	How to start and pitch your own business	
Udacity data analysis challenger track 2022	Nanodegree of data analysis	
ITI, On-line course June,2020	e-learning fundamentals	
Researcher Academy, June 2020	How to prepare your manuscript	
On-line webinar Innovety, June 2020	How to apply 10 innovative principles to revive your products, services &business models	
AIDMO-Workshop 11June, 2020	ITC Leadership in COVID-19	
On-line- Egyptian Patent Office- June,2020	The workflow of the Egyptian patent office	
ASRT May, 2020	Applied project management- level1	
ASRT March, 2020	Strategy Formulation and planning	
ASRT May.2020	Innovation support law	

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Elsevier research intelligence May, 2020	Selecting a journal for publishing using Scival""	
On-line course, almentor, 2020	Train the trainers, the complete guide	
On-line course, almentor, 2020	Business data analysis using excel	
On-line course, almentor, 2020	Change management in work and life	
On-line course, almentor, 2019	Stress Management	
On-line course, almentor, 2019	Self awareness, your GPS in life	
ARAC, August 2019	Developing the skills of faculty members	
March 2019	Pressure gauge calibration	
March 2019	Calibration of balances	
TIMS. 2018	ISO17025 General Specifications	
TIMS 2018	ISO17025 Internal Auditing	
ASRT, 9-10 December, 2018	Applying for EU H2020 research funding grants	
EU ENPI CBC MED Project FOSTER in MED (15-28 Nov. 2015)	PV certified course for installer	
Berlitz 26 Aug 12 October. 2015	English (level7) Berlitz conversation course	
National center for research 16-20 Augst. 2015.		
	Solar Energy Importance and its Practical Application course	
13-17 Dec. 2014.	Commercialization and Technology Valuation Course	
Helwan Univ.	How to use internal database for scientific research Course	
8Dec. 2014		
Innovety company, Nov.2014	Business strategy	

Innovety Company Nov. 2014	Technology commercialization,	
Innovety Company Nov. 2014	Patent information and patent search,	
Certificate from WIPO patent office, March, 2017.	"Intellectual Property Rights", Online course at WIPO patent office	
Certificate from WIPO patent office , May, 2018.	Patent Drafting	
Egyptian Patent Office, 8- 9 Sept.2015	Patent drafting course	
TIMS, 2014	ISO9001 Internal Auditing	
Egyptian association for industrial development 2-7 March 2002	Programming of PLC-LOGO	
ITC centre (a computer centre authorized from IBM) (2000-2001)	E-Business diploma (CIW Certification)	

# 7. <u>Language skills:</u> Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
English	4	4	4
Arabic	lative Languag e		

## 8. Membership of professional bodies:

- Membership of WAITRO (World Association of Industrial and Technological Research Organizations).
- Membership of WIPO (World Intellectual Property Organization)

# 9. Other Skills:

- Theory of automatic control teaching.
- PLC Programming (Principles And SIEMENSE Programming).
- Deep learning.
- Modelling and simulation of dynamic systems.
- Classic control Engineering
- Advanced control systems
- Automation/control engineering project
- Industrial automation & PLC programming.
- Computer controlled systems.
- Programming using MATLAB.
- Solar Energy design
- Medical Engineering.
- Simulation and Testing of control systems.
- Image processing implementations
- Algorithms design and implementations Using Fuzzy logic control. using Artificial intelligence Patent writing.
- -Proposal writing.
- Technology evaluation
- Microsoft office
- -Programming using C language
- -Electronic cards maintenance
- -electrical measuring instruments calibration

#### 10.Present Position:

- -Lecturer in automatic control department.
- Quality manager in Measurement and Calibration lab, TIMS.
- Working since 2013 in TICO office to support innovators and startups.

- Writing business model and market strategy

# 12. Specific experience in the region:

Country	Date from – Date to		
Egypt	2002 till now (academia)		
Egypt	2013 till now (member in technology support centre)		
Egypt	2021 till now (supporting startup in business development)		

# 14.Professional Experience

Date from - Date to	Country	Company Served	Position/Assignme nt	Description
Feb., 2014 till now	Egypt	Tabbin Institute for Metallurgical Studies (TIMS),	Lecturer in Automatic Control Department	-Teaching in postgraduate diploma - Teaching automatic control and PLC courses for engineers from industry.
April, 2014 till now	Egypt	TIMS	Deputy director of TISC (technology and innovation support center) in TIMS.	- Increasing the awareness of protecting new ideas and helping in patent drafting.
Starting from 2021	Egypt	SIS	-technical consultant for startup	Consulting & supporting engineering startup company (SIS)
2019 till now	Egypt	TIMS	Quality Manager	
May., 2005 to Feb. 2014	Egypt	TIMS	Assistant lecturer in Automatic Control Department	-Teaching PLC courses for engineers from industry.
Feb., 2002 to May, 2006	Egypt	TIMS	Electronic specialist engineer	-Electronic cards maintenance, programming with visual basic, working with measuring and calibration devices.

2001 to 2002	Egypt	CITC (IBM	Programming	- E-Business track instructor
		computer training	Instructor	
		center)		

#### 15. Courses that have been taught

- Theory of automatic control.
- Measuring devices.
- Design of control systems
- Testing the designed control system using MATLB.
- -Programming of Programmable logic control (PLC) (beginner and advanced).
- Programming of Siemense S7 PLC (beginner and advanced).
- Troubleshooting of PLC.
- IIOT and Augmented reality in industry.
- Deep learning basics using MATLAB.
- Tensorflow
- Generation of electricity from solar energy.
- Programming using PHP.
- -Programming using MATLAB.
- e-commerce course

## 16. Courses in-progress:

- Python basics
- Learning how to learn Digital transformation Internet of things.

## 17. Projects:

- Improving performance of feed forward neural network in glucose predictors (supported from Tabbin institute for metallurgical studies).
- Modelling of blood glucose diagnostic kit (nominated to be started with South Africa).

# 18. Thesis supervision:

Supervised a thesis titled:" smart grid application in Egyptian electrical transmission network", 2018.

#### 19. Area of research:

- Automatic control.
- Electrical engineering.
- Smart grid
- Enhancing the performance of artificial neural network (ANN) in prediction.
- Using whale optimization model with ANN.
- Deep learning technological applications
- Automatic control application in Biomedical engineering.

#### 20. List of Publications:

- " Using WOA with Feed Forward Neural Network in Prediction of Subcutaneous Glucose Concentration for Type-I Diabetic Patients", 22<sup>st</sup> international conference on Engineering Applications of Neural Networks, 2021.
- 2. "Protecting Overhead Transmission Lines (OHL) from Hot Spots Using Dynamic Line Rating (DLR) Calculations", accepted for publication in international conference of electrical engineering (ICEENG-12), 2020.
- 3. "Using IEEE Standard 738 to Increase Rating of Overhead Transmission Line (OHL)", Saudia Arabia Smart Grid 2019 Conference (SASG2019).
- 4. "An insulin scaling algorithm in a control system based on risk minimization of hypo- and hyperglycemia", ICEENG2018.
- "Blood Glucose Regulation Using a Neural Network Predictor with a Fuzzy Logic Controller", Journal of Intelligent & Fuzzy Systems, vol. 25, pp. 403–413, 2013.
- "Evaluation of Using a Recurrent Neural Network (RNN) and a Fuzzy Logic Controller (FLC) In Closed Loop System to Regulate Blood Glucose for Type-1 Diabetic Patients", I.J. Intelligent Systems and Applications, vol. 10, pp. 58-71, 2012.

- "Prediction of Subcutaneous Glucose Concentration for Type-1 Diabetic Patients Using a Feed Forward Neural Network", International Conference on Computer Engineering & Systems (ICCES'2011), pp. 129-133, 2011.
- "A Recurrent Neural Network Approach for Predicting Glucose Concentration in Type-1 Diabetic Patients", In proceeding of EANN/AIAI 2011, Part I (IFIP AICT 2011), pp. 254–259, 2011 9.
   Comparative Study on Super-Resolution Of Images, ICEES'2006.

#### 21. Conferences attended:

- 1. 22nd Engineering Applications of Neural Networks Conference, 2021.
- 2. 17th IFIP WG 12.5 International Conference, AIAI 2021 Hersonissos, Crete, Greece, June 25–27, 2021
- 3. 12th International conference of electrical engineering," ICEENG12", 7-9 July, 2020.
- 4. 9th Egyptian German Renewables Day, October 2018.
- 5. The International Conference Of Electrical Engineering, 3-5 April, 2018.
- 6. The Fifth Forum for Occupational Safety and Health and Securing the Work Environment, 14 May, 2018.
- 7. 11th International conference of electrical engineering," ICEENG11", 3-5 April, 2018.
- 8. Science and innovation summit, March 2017
- 9. Future of energy in Egypt, Delphi Survey, Jan. 2017.
- 10. International conference of smart grid, "Africa smart grid forum,2016".
- The international conference of collaboration between industry and academia,
   2015
- 12. The international conference of collaboration between industry and academia, 2014.

- 13. The International Conference on Computer Engineering & Systems (ICCES'2011), 2011.
- 14. The 2006 International Conference On Computer Engineering & Systems (ICEES'2006), Ain Shams.

#### List of Reviewed papers:

- "Congestion Management of Integrated Transmission and Distribution Network with RES and ESS under Stressed Condition", International Transactions on Electrical Energy Systems. 2020.
- 2. "On VMD of Wind Speed for Real-Time Thermal Rating Determination in Power Transmission System." Energy & Environment journal., 2021.

#### Three referees:

- Dr. yousry Barakat. (professor at TIMS)
- Dr. Zaki Bassuoni. (professor at faculty of engineering Helwan Univ.)
- Dr. Tarek Sami (professor at TIMS)