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Curriculum vita

Ahmed Abdulaleem Abdullah Mohammed

Personal information

Name	**: Ahmed Abdulallem Abdullah Mohammed**
Gender	**: Male**
Nationality	**: Egyptian**
Religion	**: Muslim.**
Birth Date	**: 1/10/1983**
Birth Place	**: Abdullah tamman- elrakabia – domyat**
Military status	**: completed**
Address	**: Rakabia – kafr elbatekh - domiatta**
Martial Status	**: married.**
Job	**: EPSE branch manager**

Educational Information:

- **B.Sc. of computer and control Systems Department With a graduation grade of very Good (83.63%) with honor ranked third, based the Total degree of the five years.**
- **Master degree in 12/2012 mansoura university -faculty of engineering – Electrical power department with thesis title "Redundant Remote Monitoring of Distributed Generation Resources".**
- **Ph.D degree in 7/2017 mansoura university-faculty of engineering – Automatic control systems department with thesis title "A New WSN Routing Strategy for Enhancing Wind Farms Power Forecasting"**
- **Certified consultant for electrical designs of facilities.**
- **Associate professor Degree 10/2024.**

Experience:

- **From 1/3/2007 to 1/9/2007 work in control system company (PEPARAB company) (full time).**
- **From 1/9/2007 to 1/9/2010 work in Sinai university as a demonstrator (full time).**
- **From 1/9/2007 to 1/9/2010 work in control system company (PEPARAB Company) as (part time).**
- **From 1/7/2011 to 1/7/2017 Work in ABDULLAH ABUNAYYAN GROUP as R&D and training manager in Saudi Arabia.**
- **From 1/7/2017 until 10/2024 work in Delta University as Assistance Professor (full time).**
- **From 10/2024 until now work in Delta University as Associate Professor (part time).**
- **From 7/1/2024 until now Egypt branch manager and consultant for EPSE Company – Saudi Arabia - (Full time)**

Research article

- BM El-den, Walid A Raslan, **Ahmed A Abdullah**, „Even symmetric chaotic and skewed maps as a technique in video encryption“, EURASIP Journal on Advances in Signal Processing, SpringerOpen, 2023, vol. 2023(1), pp.1-22.
- **Ahmed A Abdullah**, Tarek M Hassan, Bassant Mohy Eldin, „ Renewable Energy Resources Modeling Survey“, Delta University Scientific Journal“, vol. 6(1), pp. 225-235.
- **Ahmed A. Abdullah**, Hesham Ali, Tarek Hassan, Hanaa Salem Marie, „Open Issues for Intelligent Connectivity Wireless Sensor Networks (WSNs) and IoT: State of the Art“, Delta University Scientific Journal, vol. 5 (2), pp. 352-366.
- **Ahmed A Abdullah**, Tarek M Hassan, „Smart grid (SG) properties and challenges: an overview“, Discover Energy, 2022.
  Rana Mohamed El-Balka, Ahmed I Saleh, **Ahmed A Abdullah**, Noha Sakr, "Enhancing the performance of smart electrical grids using data mining and fuzzy inference engine", Multimedia Tools and Applications, Springer US, 2022, pp. 1-33
- **Ahmed A Abdullah**, Tarek M Hassan, "A Hybrid Neuro-Fuzzy & Bootstrap Prediction System for Wind Power Generation", Technology and Economics of Smart Grids and Sustainable Energy, Springer Singapore, 2021, vol. 6, pp. 1-14.
- **Ahmed A Abdullah**, "A Proposed Forecasting System for Wind Power in Smart Grids**",** AIUE Proceedings of the 2nd Energy and Human Habitat Conference, 2021,
- Ahmed E Saleh, Mohamed S Moustafa, Khaled M Abo-Al-Ez, **Ahmed A Abdullah**, "A hybrid neuro-fuzzy power prediction system for wind energy generation", International Journal of Electrical Power & Energy Systems, Elsevier, 2016, vol 74, pp. 384-395,.
- Ahmed I Saleh, Khaled M Abo-Al-Ez, **Ahmed A Abdullah**, "A Multi-Aware Query Driven (MAQD) routing protocol for mobile wireless sensor networks based on neuro-fuzzy inference", Journal of Network and Computer Applications, Academic Press, 2017, vol. 88, pp. 72-98.
- **A Abdullah**, A Saleh, M Moustafa, K Abo-al-Ez, "A proposed framework for a forecasting system of wind energy power generation", International Journal of Advanced Research in Computer Engineering & Technology (IJARCET), 2014, vol. 4.
- AE Hassan, MM El-Saadawi, SA Farghal, **A Abd El-Aleem**, "Proper Efficient Interface between DG Units and Electric Utility Grid".

Courses & Training

- **Elsewedy Electro-meter**
  - **Electro-meter fabrication**
  - **Electro-meter maintenance**
  - **Electro-meter operation.**
- **ABB training for 800Xa system**
  - **Control builder.**
  - **Human system interface**
  - **Function designer.**
- **Schneider:**
  - **Unity pro 5.1**
  - **Vijeo Citect 7.2 HMI.**
  - **Monitor Pro HMI.**
  - **Working on PLC (quantum, premium, M340) for Schneider.**
- **El-sewedy electrometer:**
  - **Pre-payment power meter.**

- Maintain the meter.
- Programming the meter.

- **SOFREL (Saudi Arabia):**
  - LS42 logger.
  - S5xx for FIU and RTU.
  - GSM communication.
  - SOFTOOLS, PCWIN software from sofrel.
- **MOTOROLA (Saudi Arabia):**
  - STS for programming the ACE.
  - MOSCAD toolbox.
  - IP gateway.
  - Radio communication
- **WONDERWARE**
  - Intouch HMI
  - Archestra HMI
- **Course no 1 To PLC (control systems , SCADA system , in touch as human machine interface)**
- **Course no 2 To PLC (advanced control systems ,advanced SCADA system ,advanced in touch as human machine interface).**
- **Redhat enterprise 5 (essential – administration – server) RHCA,RHCT certified.**
- **Microsoft trainer certified.**
- **I am expert in**
  1. **Programming (VB6 – VB.net – shell programming under Linux)**
  2. **Data Base (SQL – access)**
  3. **office packets**
  4. **Trade on internet.**
  5. **Working on Motorola PLC (ACE , MOSCAD).**
  6. **Working on Schneider PLC (Quantum, Premium, M340, Twido)**
  7. **Working on sofrel PLC and LS for flow meter detector.**
  8. **Working on wonderware for HMI (INTOUCH, ARCHESTRA)**
  9. **Working on CITECT software for HMI**
  10. **Programming touch screen maglis, semiens, delta, …**
  11. **Using the following communication (GSM, GPRS, Ethernet, Fiber optics, Radio, FIPIO, RS485,..)**

Technical Skills

❖ **programming Languages and software:**

- **C++.**
- **VB6 , VB.net**
- **SQL.**
- **PHP.**
- **HTML.**

❖ **For Control Systems**

- **Programming PLC device under IEC61131-3I with language (QLD – FBD – SFC – IL – ST)**
- **Build Human Machine Interface (HMI) and SCADA system by using Wonderware INTOUCH, Archestra or Citect Software.**

- **Make a communication between PLC (RTU'S) and SCADA System via The following Protocol.**
    1. **MODBUS** protocol RS232.
    2. **profibus protocol (FMS).**
    3. **profibus protocol (DP).**
    4. **NETDDE.**
- **Building Distributed Control Systems by using the following communication .**
    1. **R**adio**.**
    2. **G**SM.
    3. **E**thernet**.**

❖ Hardware

- **Maintain PLC hardware and software.**
- **Maintain Computer hardware and software.**
- **Network design and implementation.**
- **Design PCB for any hardware project.**

❖ Database Development Tools

- **SQL server2000**
- **Microsoft Access**

❖ Operating Systems

- **Linux Platforms.**
- **Windows Platforms,**

❖ Others

- **Microsoft office**
- **Macromedia Flash**
- **AutoCAD to graphics.**
- **AutoCAD electrical.**

Projects and experience:

1. **SCADA system for the main water valves in Damietta port (2021).**
    - **Design and supply electrical actuators to control open and close the valves.**
    - **Design the electrical and communication panel to control and monitor local/remote.**
    - **Apply 3G communication (wireless communication) over mobile network.**
    - **Supply flow and pressure sensors and design the optimal location in the water network to monitor the pressure and flow in the water network.**
    - **Apply expert condition to the system to give recommendation for operation of the network.**
    - **Apply maximum human/devices safety when supply the actuators with electricity at actuators covered by water.**
    - **Design HMI on the computer and control centers to monitor the water network, control the valves and analysis.**
2. **Establishment and development of the electrical infrastructure of the French village in Damietta Port (2020).**
    - **Supply and installation medium voltage cables.**
    - **Supply and installation medium voltage incoming and outgoing cells.**
    - **Supply and installation 11kv/380v transformer.**
    - **Construction of a concrete base for transformers.**
    - **Making paths according to the Egyptian code for laying electrical cables.**
    - **Installing lighting poles and high mast on the main streets.**
3. **Development of cathodic protection system in Damietta Port (2021)**
    - **Supply and installation rectifier units 300A DC (380VAC/24VDC).**

- **Supply and installation titanium anodes at the berths of the port.**
- **Supply and installation cathode cable from rectifier unit to the iron curtains.**
- **Measure the protection level of the system.**

4. **Setting technical specifications for development medium and low voltage electrical network in Damietta Container Handling Company (2022)**
   - **The medium voltage cables.**
   - **The medium voltage incoming and outgoing cell.**
   - **Low voltage cables.**
   - **The low voltage panels.**
   - **Power factor panels.**
   - **Design the new paths of electrical network.**
5. **Design, supply, and install on-grid solar cell electrical generation station above the port stores (2019, 2020, 2021, and 2022).**
   - **Supply and installation solar cell JINKO with power 530 W.**
   - **Supply and installation on grid solar inverter ABB 50 KW.**
   - **Supply and installation Aluminum cell carriers.**
   - **Supply and installation cables and trays.**
   - **Supply and installation self-cleaning system.**
6. **SCADA system for manage the electrical station and network in Damietta port.**
   - **ABB DCS system 800XA**
   - **Control and monitor the motorize MCCB switches in low voltage.**
   - **Control and monitor the medium voltage incoming and outgoing cells.**
   - **Analysis the historical and real data.**
   - **Control and monitor the light control switches.**
7. **Onshore power supply (OPS) project**
   - **Supply the vessels on the berths with electrical power to shutdown diesel generator and minimize carbon emission.**
   - **Provide 380V/50 hz and 440V/60 hz.**
   - **Medium and low voltage cables.**
   - **Cable assembly rollers.**
8. **Firefighting & fire alarm systems Design and implementation (hardware and software).**
   - **Design panel form.**
   - **Design hardware PCB and Component selection.**
   - **Programming CPU (WILKE processors) to implement protocol.**
   - **Select the proper detector working with this panel.**
   - **Feature for this project:**
     - **Able to connect 255 detectors to this panel.**
     - **Cyclic time for token is less than 2 sec.**
     - **Scanning system.**
     - **Connect between panel and detector over power line.**
     - **33 volt / 5ma power for this panel.**

9. **Control system data acquisition and report engine.**
   - **Build software to collect mechanical system status and save in SQL database.**
   - **Period time is less than 1 sec.**
   - **Make reporting program to show the status for any part of system from time x to time y.**
10. **Data encryption system by using dongle technology.**
    - **Now I prepare to design hardware key for security software.**
    - **I study the product in the market to collect information.**
    - **Then I make the dongle by using ready hardware and software from.**
    - **Then I will design the software on ready hardware.**
    - **Then I will design the hardware.**

11. **Design and implementation car computer project software and hardware.**
    - **This project to improve the car behavior with the driver.**
    - **Save all event of the car in 24 hours.**
    - **Send this data wireless to the server immediately.**
12. **Design new version of isagraf programming language for PLC using previous versions files.**
    - **Make dp-ao card 56 channels instead of 32 channels.**
    - **Make dp-ai card 56 channels instead of 32 channels.**
    - **Make the installation is very speed.**
    - **Make the interface of the installation is more interacted.**
    - **Make the compiler without dongle (open version of isagraf).**
    - **Increasing more compilers to more processor.**
13. **Design redundant communication using GSM modem GEN40i form gener company for project in Saudi Arabia - GADDA**
    - **Programming the GSM modem using the script language and AT commands.**
    - **Design VB6 application for managing the communication between the HMI and GSM modem.**
    - **Prepare the document for the solution of the problem.**
14. **Student management system**
    - **This system has been designed for Delta University.**
    - **The system manages the student degrees and attendance for all years in the university.**
    - **The professor can handle all operation of the student from one screen.**
    - **Each user can take authority for some operation selected form special screen.**
15. **Burida project in Saudi Arabia (problem in GSM communicartion)**
    - **Configure the module RTU S530 from sofrel.**
    - **Setting the received and transmitter SIM cards.**
    - **Programming the PCWIN for monitoring the status of the RTU sensors.**
16. **Radio redundant communication using ACE3600 from Motorola.**
    - **Design a redundant communication system for a project water treatment in GADDA- Saudi Arabia.**
    - **Programming the HMI – INTOUCH for monitoring the RTU's from the operating communication.**
    - **Programming the FIU for take the information from master the Radio.**
17. **Distributed generation monitoring**
    - **Design a software and hardware for monitor DG.**
    - **Design a GSM circuit for wireless monitoring.**

Awards

1. **Obtaining the title of the ideal employee at the level of the General Administration of Electromechanical Engineering - Damietta Port Authority in 2016**
2. **Obtaining the title of the ideal employee at the level of Damietta Port Authority in 2018**
3. **Obtaining a certificate of appreciation from the Delta University for Science and Technology in order to participate in the advancement of the university.**
4. **Certificate of Appreciation for obtaining a research project presented at events and a student conference for presenting research and student projects at the Japanese University 2018.**
5. **Getting first place for the graduation project "Embedded system for leakage detection in pipeline" in the competition held at Port Said University 2021.**

Conferences & Workshops

1. **Participation in the activities of the International Conference on the Role of Joint Projects in Achieving Arab Economic Integration, held at Delta University 2012**

2. **Participation in the organization and activities of the International Conference ICI14 in 2014.**
3. **A workshop entitled Statistics at Your Service, held at Delta University of Science and Technology 2014**
4. **Arbitration of research papers of the scientific conference for students held jointly between Damietta University and Delta University (future scientists) in 2018.**
5. **Participation in a research project in the student conference held at the Japanese University 2018.**

Quality works

1. **Participation in quality work at Delta University to obtain accreditation from the Quality Assurance and Accreditation Authority.**
2. **Coordinator of the financial and material resources standard for self-study of the Faculty of Engineering, Delta University of Science and Technology, from 2016 until 2022.**

Thanks for your interesting,,,