

Automation and Cyber Security Engineer with more than 16 years' experience in industrial automation as well as oil and gas industry. Part time trainer in instrument and control, OT Networks, Cybersecurity, Functional safety. Certified FS Engineer by TUV and Certified ATEX Explosion proof inspector. Having an academic interest in Modeling and Control of industrial processes using the AI modern approaches (Cyber security for control systems & Artificial Intelligence, Machine Learning and Data analysis).

## PERSONAL DATA

Nationality : Egyptian  
Gender : Male  
Residence : Menoufia

## EDUCATION

: B. Sc. in Industrial Electronics & Control Engineering, Menoufia University, 2008

## LANGUAGES

Arabic : Native Language  
English : Fluent

## TRAINING COURSES AND CERTIFICATIONS

- : NEBOSH IGC (International General Certificate).
- : NEBOSH IOGC (International Technical Certificate in Oil and Gas).
- : TOT (Training Of Trainers).
- : TUV PH&RA.
- : Nebosh PSM.
- : CompEX Gas and Vapors (certified Explosion Proof Inspector).
- : Certified PHA HAZOP leader (TUV NORD).
- : Triconex/Wonderware Intouch.
- : Kalabsha customized training for Foxboro PAC loops (Apr. 2019).
- : Allen Bradley PanelView Plus (Mar. 2018).
- : Cybersecurity for Automation, Control, and SCADA systems (Apr. 2018).
- : Triconex WonderWare Intouch Training Course (Jun. 2018).
- : 3006 LINTools-Operations Server and Viewer Fundamentals (Oct. 2018).
- : HAZOP practical study (Feb. 2017).
- : Allen Bradley ControlLogix Fundamentals, Maintenance & troubleshooting Course (Oct. 2017).
- : Industrial Data Communication Systems (Nov. 2015).

- : Safety Instrumented Systems; New Emergency Shutdown Approach (SIS) (Feb. 2013).
- : Applying Instrumentation in Hazardous (Classified) Locations (Jun. 2013).
- : Applying Standard Instrumentation and Control Documentation (Dec. 2013).
- : Applying Standard Instrumentation and Control Documentation (Dec. 2013).
- : New Approaches in DCS & SCADA systems (Jun. 2012).
- : Advanced Process Control; loops, analysis, and troubleshooting (Feb. 2011).

## CHRONOLOGICAL EXPERIENCE RECORD

<b>Dates</b>	: From Jun. 2010 till now
<b>Employer</b>	: Khalda Petroleum Company (KPC)
<b>Job title</b>	: Lead Automation & OT Network Engineer
<b>Job Description</b>	: <ul style="list-style-type: none"> <li>• Part of KPC OT team for digital transformation of KPC fields.</li> <li>• Head of OT Networks and OT Cyber Security.</li> <li>• Preparing tender packages for control systems and reviewing technical offers.</li> <li>• Reviewing engineering studies and verifying installation is done according to the approved documents.</li> <li>• Participate in engineering studies with surface operation team and third-party engineering companies as well as HAZOP, HAZID, FERA studies.</li> <li>• Prepare proof test procedures for KPC safety instrumented systems, and approve the testing process reports.</li> <li>• Preparing proposals for facility upgrades and initiate the upgrade activities.</li> <li>• Following up for new projects with surface operation team and Engineering Companies.</li> <li>• Design and selection for facility instruments.</li> <li>• Design and installation for small and medium scale control Systems including HMIs.</li> <li>• EX inspection team leader in SUMPETCO responsible for arranging and applying EX inspections and preparing correction plan for the findings.</li> <li>• Maintenance and troubleshooting for facility instruments and control system, including Explosion proof panels, junction boxes, and EX devices.</li> <li>• Supervising construction team during construction activities (3 engineers + 8 technicians per shift)</li> <li>• RAMS advisor responsible for process safety management, leading HAZOP/HAZID studies and other operational risk assessments in SUMPETCO field and recently assigned for preparing HSE case for SUMPETCO.</li> <li>• Commissioning Manager for 2 projects: <ul style="list-style-type: none"> <li>- Installation of Indirect Heater Treater.</li> <li>- Umb Process Integrated Control and Shutdown System (ICSS).</li> </ul> </li> <li>• Responsible for coordination between project and operation departments, reviewing and approving construction documents, checking and correction of all drawings, handover with project department, pre-</li> </ul>

commissioning checks and pre-startup safety reviews, and hand over to operation department including startup.

**Dates** : From Jan. 2009 till Oct. 2010  
**Employer** : SYSTECH control systems technology  
**Job title** : Automation Engineer  
**Job Description** :

- PLC system design based on Schneider (PREMIUM, M340, QUANTUM) and Siemens SIMATIC (S7-300, and S7-400).
- SCADA system design, based on Wonderware Intouch SCADA software, and Intellution (FIX) SCADA Software.
- Contacting and international organizations to arrange for procurement and installation process in different facilities in Egypt and KSA.
- Contacting local companies and organizations and addressing their needs to expand the company activities.

**Dates** : From Sep. 2008 till Nov. 2008  
**Employer** : MIA for manufacturing and supplying Equipment  
**Job Description** :

- Design for Production Lines (painting, powder and coating).
- Design for industrial robot.

**Field of experience** :

- Industrial Automation Field:
  - Application Programming Software (PLC/SCADA):
    - ❖ Allen Bradley RSLogix 500, RSLogix 5000.
    - ❖ Allen Bradley RSView.
    - ❖ Allen Bradley Factory Talk.
    - ❖ Siemens Logo! Soft Comfort for Logo Logic Modules.
    - ❖ Siemens MicroWin software for S7 200.
    - ❖ Siemens SIMATIC Step7 for S7 300/S7 400.
    - ❖ Siemens SIMATIC WinCC SCADA and WinCC Flexible for HMI Panels.
    - ❖ Siemens SIMATIC TIA Portal Engineering Framework.
    - ❖ Schneider Unity Pro software M340/M580.
    - ❖ Schneider Zelio Soft for Zelio Smart Relay.
    - ❖ Schneider PL7 Micro software for TSX Micro PLCs.
    - ❖ Schneider Vijeo Citect SCADA and Vijeo Designer for HMI Panels.
    - ❖ Tristation software for Triconex PLCs.
    - ❖ Wonderware-In touch.
    - ❖ Experience with the popular brands in Oil and Gas, and Water Treatment industries.
  - Industrial Communication Networks/Protocols:
    - ❖ Siemens PPI, MPI, AS-I, Profibus DP/PA, Industrial Ethernet, and Profinet Communications.
    - ❖ Schneider / Telemecanique Unitelway, Modbus, CANopen, Modbus TCP/IP Communications.
    - ❖ HART/ FieldBus.
- Instrumentation: Experience with the popular brands in Oil and Gas, and Water Treatment industries.
- Embedded Systems Design (Microcontrollers):
  - Motorola (MC68HC05, MC68HC12).
  - MicroChip (PIC 16F84, PIC 16F877).

- Real Time Control Implementation and PC HMI:
  - C / C++ / C#.
  - Exposed to Sun Microsystem Java.

Delivered Trainings:

- Advanced Process Control (Client: OGS).
- Automatic Tank Gauging (Client: OGS).
- Programmable logic Controllers (Client: Future trading).
- Distributed Control Systems (Client: OGS).
- SCADA system (Client: OGS).
- Industrial Communication Systems (Client: OGS).
- Process Hazard Analysis (Client: OGS).
- HAZOP Study Practical Workshop (Client: OGS).
- Safety Instrumented Systems (Client: OGS).
- Hazardous Area Classification (Client: OGS).
- Fire and Gas Systems (Client: Ezz Steel).
- Explosion Proof equipment inspection and maintenance (Client: OGS).
- SIL determination (Client: Unilever Egypt).