

Holds a B. Sc. in Electronics & Communication Engineering and has about 9 years hands-on experience working in I&C field and DCS systems.

## **PERSONAL DATA**

Nationality : Egyptian  
Birth Date : 27/08/1986  
Gender : Male  
Marital Status : Married  
Residence : Alexandria

## **EDUCATION**

: B. Sc. in Electronics & Communication Engineering, Alexandria University, 2008  
: Master Degree (ongoing)

## **LANGUAGES**

Arabic : Native Language  
English : Fluent  
French : Basics

## **COMPUTER SKILLS**

: Windows, MS Office (Word, Excel, Access, Power Point), Internet  
: AutoCAD 2015  
: MS Visio  
: MS Project  
: OneNote  
: Publisher  
: Visual Basic

## **TRAINING COURSES AND CERTIFICATIONS**

: ESOL / IELTS English Language, Luton Business & Computing College (England) (Sep. 2007).  
: ICDL (International Computer Driving License), Ministry of Communication, Egypt (Dec. 2007).  
: Matlab (Simulink), Faculty of Engineering, Alexandria University, Egypt (Jan. 2008).

- : Steam Power Plants Maintenance & Operation, Upper Egypt Electricity Production Co. (UEEPCo) (Apr. 2009).
- : Steam Turbine Maintenance & Operation, Mitsubishi Heavy Industries Ltd MHI L.T.D, Egypt (Nov. 2009).
- : Steam Generating Boiler Maintenance & Operation, Anslado Caldaie, S.p.a Italy (Feb. 2010).
- : Burner Management System (BMS) Maintenance & Operation, Anslado Caldaie, S.p.a Egypt (Sep. 2010).
- : DCS 800xA Operation and Maintenance, ABB Italy S.p.a, Italy (Nov. 2011).
- : Dyasis Netmation DCS Maintenance & Operation, Mitsubishi MHI L.T.D (Feb. 2012).
- : Step7 300 Hardware Maintenance & Troubleshooting, Siemens Germany, Egypt (Dec. 2012).
- : Allen Bradley Maintenance & Operation, New Horizons, Egypt (Feb. 2013).
- : 3500 Configuration Rack Module, Ansaldo Caldaie, S.p.a, Egypt (May 2013).
- : System 1, Bentley Nevada, GE, Egypt (Aug. 2015).
- : ELOP 2 Factory, HI-Matrix, Egypt (Jul. 2015).
- : Gas Turbine Fundamentals for I&C Engineers, Siemens, Egypt (Jun. 2016).
- : Negotiation Skills, Egyptian Armed Forces Center, Egypt (Jan. 2017).
- : Solving Problems, Egyptian Armed Forces Center, Egypt (Mar. 2017).
- : PCS7, Siemens Automation, Egypt (Apr. 2015).
- : Italian Language Course (ongoing).

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Dec. 2013 till now  
**Employer** : Rashid Petroleum Company (RASHPETCO)  
**Job title** : Turbo-Machinery Lead Engineer

**Dates** : From Apr. 2009 till Dec. 2013  
**Employer** : West Delta Electricity Production Company  
**Project** : Abu Qir Power Plant  
**Job title** : I&C Lead Engineer

**Dates** : From Jun. 2008 till Apr. 2009  
**Employer** : Alexandria Petroleum Company  
**Job title** : I&C Basic Engineer

**Field of experience** : • Basic Experience:

- Reading / Programming Logic with Function Block Diagram FBD / Ladder / SFC Sequential Flow Chart.
- Reviewing P&IDs / Wiring / Hookup Drawings.
- Continuity / Loop Check.
- Functional test.
- PID Tuning.
- Process / Loop Tuning.

- Field Experience:
  - Maintenance & Calibration for various Instrumentation types of different manufatureres like Rosemount, Yokogawa, ABB, Siemens:
    - Pressure Transmitters, Gauges, Switches.
    - Differential Pressure Transmitters, Gauges, Switches.
    - Temperature Transmitters, Gauges, Switches, thermocouples, RTDs.
    - Level Transmitters including DP, ultrasonic, Guided Radar, Dispalcer.
    - Flow Transmitters including DP, Corolios.
    - Familiar with Foundation Fieldbus Instrumentation FF.
  - Maintenance & Calibration for various Control valve types of different manufatureres like Fisher, Siemens, ABB, SMC:
    - ABB TZIDC -200.
    - SMC IP-8100.
    - Siemens SIPART PS2 PA.
    - Fisher DVC SIS-6000.
  - Maintenance & Calibration for various Motorized & ON-OFF Valves types of different manufatureres like:
    - Auma / Rotork Motorized Valves.
    - Typical Solenoid / Servo Valves like Asco / Moog.
    - Limit switches including Magnetic, Mechanical ones.
  - Excellent use of aiding tools for the lab and the field:
    - HART Communicator 375 / 475.
    - DRUCK Pump DPI 610/615/620/680 "Pnuamtic and Hydraulic".
    - Multi-function generators like Beta Claibrator DPI-880.
    - Temperature Ovens.
    - Frequency Generator.
    - Charge Generator "related to Bentley Nevada Conditioners".
    - TK-3 Kit "Vibration / Speed" simulators related to Bentley Nevada.
  - Flame Scanners of Ignitors / Burners & Furnace / Stack TV Cameras.
  - Fire and gas equipment like heat detectors, gas detectors, UV flame detectors, Emergency PB.
- DCS / PLC Experience:
  - ABB -> 800xA:
    - Excellent use of Control Builder / Engineering Work Place / Operator Work Place PG2.
    - Excellent use of control structure and functional structure.
    - Familiarly with system topology and layout.
    - Adding / Modifying IOs / Forcing.
    - Surfing & Modifying Logic pages / Adding-Removing Pages.
    - Test modes, Code generation and downloading.
    - Project Backups.
    - Configuring Alarm-Events handlers, Trend Displays.
    - Excellent use of Bulk Data Manager.
    - Working with hardware AC-800M.
  - Metsubishi -> Dyasis Netmation:
    - Excellent use of Engineering Maintenance Station –EMS- & Operation Station –OPS and ORCAview.
    - Familiarly with system topology and layout.

- Excellent use of Trender, Alarm-Event viewers.
- Surfing the logic pages.
- Generating many types of reports as necessary by the ACS.
- Familiar with Mitsubishi Hardware and cabinets.
- GE -> Mark Vie:
  - Excellent use of Toolbox / Workbench for simplicity.
  - Familiarly with system topology and layout.
  - Adding / Modifying IOs / Forcing.
  - Surfing & Modifying Logic pages / Adding-Removing Pages.
  - Building and downloading Modifications.
  - Project Backups.
  - Configuring Alarm-Events handlers, online Trend Displays.
  - Configuring new pages, EGD modifications.
  - Working with Mark Vie Typical hardware.
- Allen Bradley -> ControLogix 5000:
  - Excellent use of controLogix & Factory Talk.
  - Familiarly with system topology and layout.
  - Adding / Modifying IOs / Forcing.
  - Surfing & Modifying Logic pages / Adding-Removing Pages.
  - Building and downloading Modifications.
  - Communicating with a Controller.
  - Familiar with typical controLogix Hardware.
- Siemens -> S7-300/400:
  - Excellent use of Simatic Manager & Wincc.
  - Familiarly with system topology and layout.
  - Adding / Modifying IOs / Forcing.
  - Surfing & Modifying Logic pages / Adding-Removing Pages.
  - Building and downloading Modifications.
  - Familiar with typical controLogix Hardware.
- Condition Monitoring / Plant Performance:
  - Bentley Nevada -> 3500 Rack Module:
    - Installation of Transducers / sensors "Vibration and Axial Displacement".
    - Commissioning of the installed sensors, cabinet and control system and linearity check.
    - Using the software to configure / modify the following items:
      - Monitoring System SW & HW.
      - Using Alarm/Event function.
      - Modifying / Configuring Modules.
      - 3500/92 Communication Gateway.
      - 350022M Transient Data Interface.
      - 3500/33 16-Channel Relay Module.
      - 3500/42M Proximitor Seismic.
      - 3500/45 Position Monitor.
      - 3500/53 Overspeed Detection System.
  - Bentley Nevada -> System 1:
    - Using the Event & Alarm Manager.
    - Using the Journal Editor.
    - Configuring the Enterprise View.
    - Using Trend Plots.
    - Using Display Utilities.
    - Managing Startup and Shutdown Events.
    - Using the Management Console Client.

- Using manual input tool for the Bentley Nevada performance.
- ABB -> Historian PGIM:
  - SQL Programming for filtering.
  - Programming Periodical Reports.
  - Programming Signal Trigger- Reports.
  - Working with Signal Explorer.
  - Working with Event Manager.
- ABB -> Plant Performance PGP:
  - Creating Database.
  - Creating Graphics.
  - Creating User Calculation.
  - Loop Auditing.
  - Auditing Reports.
- Fire & Gas Controllers:
  - HI-Matrix -> ELOP2 Factory:
    - Adding / Modifying IOs / Forcing.
    - Surfing & Modifying Logic pages / Adding-Removing Pages.
    - Test modes, Code generation and downloading.
    - Project Backups.
- Power Plant Operations:
  - Steam Generating Boilers:
 

Excellent knowledge of the operation / maintenance / troubleshooting for the below systems in a whole or as detailed for their components:

    - Burner Management System (BMS).
    - Boiler Protection System (BPS).
    - Air & Flue Gases System.
    - Water & Steam System.
    - Fuel (Natural Gas, Mazout & Solar) System.
    - Boiler Start-up Firing Procedures.
    - Boiler Shut Down Procedures.
  - Steam Turbines:
 

Excellent knowledge of the operation / maintenance / troubleshooting for the below systems in a whole or as detailed for their components:

    - Lubrication and Control Oil.
    - Vacuum.
    - Turning Gear.
    - WaterBox.
    - Extraction Steam.
    - Steam Bypass.
    - Speed Control.
    - Turbine Master (GOVERNERS).
    - GOVERNER / LOAD LIMITER.
    - Turbine Start-Up / Shut Down Procedures.
  - Balance Of Plant:
    - Coordination.
    - Feedwater System Turbo / Electric Start-up Pumps.
    - Condensate systems.
    - Circulating Water Systems.
    - Auxiliary Steam systems.
  - Unit Coordination:
    - Coordination mode.

- Boiler Follow Mode.
  - Turbine Follow Mode.
  - Dispatcher Demands.
  - Frequency Correction.
  - Pressure Correction "Constant / Sliding".
- Gas Turbine Operations:
  - Control & Lubrication oil (Mineral + Synthetic).
  - Fuel Gas system.
  - Ventilation System.
  - Anti Surge Control.
  - Seal Gas system.
  - Fire Fighting System.
  - Speed Control & Speed Limitations.
  - Fuel Control Modes.
  - Turbine Wash (Online / Offline).
  - Bleed Valve Control.
  - Level 1 & 2 Maintenance.
- I've started my career in Alexandria Petroleum Company where I've spent more than 10 months following a course named "Lessons in industrial Instrumentation" which was a very good practice to have plenty of theoretical information related to the field which later on was found to be extremely important for maintenance and even plant improvements.
- Then I moved to WDEPC which gave me the opportunity to work with different local and European mentalities during the commissioning phase of a large (2x650MW) Power Plant in Abu Qir, Alexandria that I've witnessed from A to Z which technically duplicated my years of experience and also developed my leadership skills. I've worked with DCS, PLC, Field Instrumentation, Steam Turbines, Steam Boilers, Feed water pumps, and many other typical BOP for a large Steam Power Plant.
- After that, I moved to Rashpetco, where I work right now as a Turbo-machinery Control Systems Engineer. I've worked with gas turbines manufactured by GE, Siemens, Solar. I've had the experience of their new control systems as well. This has helped me to learn a lot about mechanical general stuff and the mechanical principles related to rotating equipment in general which improves the troubleshooting abilities of any Control Systems Engineer.