

100146-CSX-258DST-E-2008
Senior Substation Automation Engineer

Holds a B. Sc. in Electrical Power & Machines Engineering and has over 8 years hands-on experience working in automation field.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 01/10/1986
Gender : Male
Residence : Currently KSA

EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Cairo University, 2008

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Power Point, Access), Internet
: AutoCAD 2D
: MS Visio
: MATLAB programming
: MATLAB SIMULINK for power systems
: Visual C++ programming

TRAINING COURSES AND CERTIFICATIONS

- : Certified Trainer, ABB, Riyadh (Saudi Arabia) (Oct. 2016):
 - Facilitation Skills.
 - Accelerated Learning for trainers.
- : First AID steps in case of accidents on work site, ABB, Riyadh (Saudi Arabia) (Aug. 2016).
- : Power System Diploma by ABB, ABB, Riyadh (Saudi Arabia) (from Jan. 2016 till now):
 - Reading Electrical drawings.
 - Low Voltage Switchgear.
 - Medium Voltage Switchgear.
 - Protective Relay Theory and Applications.

- Protection and Coordination of Electrical Power System.
 - System and Equipment Grounding.
 - Feeder Protection.
 - BUSBAR AND CAPACITOR PROTECTION.
 - Harmonics and Power Quality.
- : Substation Automation Operation for Customer, ABB, Riyadh (Saudi Arabia) (May 2013): Being certified to conduct training for the utility SCADA engineers on MicroSCADA program operation with technical aspects.
- : Power Systems and Substation Automation and Protection, ABB University, Baden (Switzerland) (Sep./Oct. 2012):
- IEC61850 Substation Automation Fundamentals.
 - MicroSCADA Pro for Substation Automation operation.
 - MicroSCADA Pro configuration for Substation Automation solutions.
 - Configuring ABB relay series with PCM600 tool.
 - Substation Automation Systems Integration.
- : INSULA for electric current transformers and insulation, 6th of Oct. City.
- : ABB Arab, 10th of Ramadan City.
- : TEBCO Factory, 6th of Oct. City.
- : BAHGAT's Group Factory for Plastics, 6th of Oct. City.
- : Network Training Centre (NTC) for Electricity.
- : Field trip to National Cement Company.
- : Field trip to MADICO Factory for motors & generators.
- : ICDL
- : AutoCAD 2D in layouts, Schemes and electrical drawings, Faculty of Engineering, Cairo University Lab, Cairo (Egypt) (Aug. 2008).
- : MATLAB programming, Faculty of Engineering, Cairo University Lab, Cairo (Egypt) (Jul. 2005): Scripting an m-file in MATLAB to execute a general program.
- : MATLAB SIMULINK, Faculty of Engineering, Cairo University Lab, Cairo (Egypt) (Aug. 2005): Simulation for power system network using MATLAB.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Apr. 2012 till now
- Employer** : ABB Automation, Riyadh (Saudi Arabia)
- Projects** :
- Substation Automation Leader Commissioning Engineer for two 132KV/13.8KV Substation In Riyadh (Ghurnatah & Al Faisaliyah)
 - Substation Automation Design Engineer for four central 132/13.8KV (Al Nazeem, Al Aziziyah, Al Tawdhiyah, Al Kharj), one 132/33/13.8KV Al Rass Substation, Two western substation 110/13.8KV (Al Zahraa, Al Sharayia) and doing FAT
- Job title** : Senior Substation Automation Systems Design & Commissioning Engineer
- Job Description** :
- Release technical purchase orders for SAS items.
 - Supporting tendering, commissioning teams in technical aspects.
 - Conducting SAS training for customers as a certified trainer by ABB.
 - Participation in customer/consultant design review meetings.

- Performing FAT (Factory Acceptance Test) and SAT (Site Acceptance Test) for the Substation Automation system.
- Supporting commissioning team.
- SCADA Engineering.
- Configuration and Integration of different relay types/manufacturers into ABB SAS.
- Developed Skills:
 - IEC61850 parameterization of ABB, ALSTOM, Siemens, SEL, ZIV, Reinhausen-TAPCON, Schweitzer - SEL-487V, SEL-411L.
 - Goose Configuration of ABB Make – REC670 Relay.
 - Configuration and Integration of ABB 670 Series, RED 670, RET670, REC670, REF615, ABB 650 Series.
 - Function testing for relays of different manufacturers. Configuration of (IEC101, IEC104) communication protocols.
 - MicroSCADA Picture Engineering.
 - Signals and data Engineering.
 - Substation Automation panel layout design.
 - IED Communication Testing Using ABB Software CET / SNMP Obermeier / ITT.

Dates : From Mar. 2011 till Apr. 2012

Employer : Optimum Engineering and Trading, Cairo

Projects :

- Control system maintenance of a sewage processing plant in Helwan City, Egypt
- Control system maintenance of a sewage processing plant in Al Gabal Al Asfar area, Egypt

Job title : Lead Engineer – Process Automation Maintenance

Job Description :

- Leading an automation team for process automation maintenance in sewage processing plant in Helwan City, Egypt.
- Generating monthly report for spare parts needed and the maintenance operations.
- Developed Skills:
 - Control system with PLC-SCADA of sewage processing plants.
 - Dealing with SIEMENS SCADA (Wincc) configuration, PLC (S7 200/S7 300) programming and installing inverters (Micromaster).
 - Programming Allen Bradley PLC system (PLC5-SLC500 - RSlogix500 SW).

Dates : From Oct. 2010 till Mar. 2011

Employer : Al Gammal Group, Cairo

Projects :

- Upgrading two ingot casting chain machines in Egypt Alum Company in Naga Hammadi, Egypt by replacing old Allen Bradley PLC2 control system with a new control system of Siemens S7300 controller, touch Panel, testing, implementing the new control system panel, preparing technical drawings and project documentation
- Design a control panel, PLC program, commissioning and start-up for two air bag filters in Turah Cement Factory, Egypt

Job title : Process Automation Project Engineer

Job Description :

- Design and Implementation of PLC and HMI process automation systems of SIEMENS and Allen Bradley.

- Developed Skills:
 - Upgrading a Control system with PLC-SCADA of Aluminum ingot casting machine.
 - Dealing with old "Allen Bradley" PLC system (PLC2).

Dates : From Mar. 2009 till Sep. 2010

Employer : ConTech, Authorized System Integrator of Schneider Alliance, Cairo

Projects :

- Al Burullus GAS Company: Design and implementation of a SCADA system and a Hot-Standby Quantum PLC data concentrator system program for substation Automation of Al Burullus GAS Company (phase 7) & performing a FAT in Schneider factory, Egypt.
- Poly-Estyrenics Production Company: Design and implementation of a SCADA system and configuring SIS GW as a redundant gateway system connected to a Hot-Standby Quantum PLC system, generating the data base of the whole project and technical drawings for substation Automation of Poly-Estyrenics Production Company in Egypt.
- Water treatment Plant in Bani Hussain area: Design a SCADA system and a PLC program for a water station plant in Bani Husain in Assiut Province, Egypt and performing FAT test, commissioning and starting up the station.
- Sugar factory boiler: Design and implementation of HMI program of a Boiler in the sugar company in Al Hawamdia, Egypt and implementing it to a Schneider electric HMI to be utilized to a micro PLC.
- Plastic factory: Design and implementation of an HMI program of a Sidel machine for plastic injection in Nile factory in new Al-Salhia City, Egypt, implementing it to a Schneider electric HMI and utilizing.
- Diesel Engines factory: PLC programming for a lathe machine in Helwan diesel factory located in Shoubra, Egypt.
- Hurghada Hilton hotel: Designing a control panel for two pumps system for Hilton hotel with a Twido plc and two inverters (Altivar) 7.5 kW, programming the plc and HMI.
- Gulf of Suez Company: Design and testing for a Sequential control program for oily water treatment station for Gulf of Suez, Egypt under consultancy of Enppi.

Job title : Process Automation Site Engineer

Job Description :

- PLC, HMI Programmer and SCADA Designer.
- PID Loop controller parameterization.
- Implementing motor soft starters -Altistart- and VSD's (Variable speed drives -ATV-).
- Calibration and wiring for instrumentations including sensors and actuators.
- Developed Skills:
 - Experience in Process sensors and instrumentation of different manufacturers like Endress+Hauser, Telemecanique and Drexel brook.
 - Dealing with Industrial protocols (Modbus, MPI, Profibus, Profinet, Modnet).
 - Protection relays (Sepam, Tesys, powerlogic, LT6).
 - Configuring Protocol Bridges like EGX, anybus converter, SIS gate way.
 - Testing and Configuration of OPC Server/Client.

- PLC programming (ladder, FBD, ST, Grafset, IL).
- Installing and setting communication between Inverters (VSD - Altivar-), soft starters (Altistart) and PLC.
- Experience in Schneider programming tools for PLC, SCADA, RTU's, and HMI's (Unity, Vijeo Citect, Vijeo Designer, PL7, etc.).
- Conventional control circuits.

Skills:

- Design, Testing and Commissioning for substation automation system.
- PLC programming and SCADA systems design.
- MATLAB scripting, and Simulink for system modeling, testing.
- Excellent leadership qualities as being responsible for a team of 8 engineers in process automation maintenance.