

Holds a B. Sc. in Electrical Engineering (Power & Control Systems section) and has over 13 years hands-on experience of Industrial Automation, Integrated Control and Safety Systems (ESD, PLC, TMC, DCS, VMS, F&G, Vendor packages), HMI, SCADA software, and Batch Control applications) in Oil & Gas, Petrochemicals and Power industries.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 30/11/1985
Gender : Male
Marital Status : Married
Residence : Nasr City, Cairo

EDUCATION

: B. Sc. in Electrical Engineering (Power & Control Systems section), Benha University, 2008

LANGUAGES

Arabic : Native Language
English : Excellent
French : Fair

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Honeywell EXP-2001R4500; Experion PKS: Fundamentals – Control Execution Environment Controller Implementation.
- : Honeywell EXP-05C3R500; Experion PKS: Fundamentals – C300 Troubleshooting and Maintenance.
- : SILworX – HIMax Engineer & Communication Training.
- : Certified Triconex Engineer (Courses # 8902, 8903, 8905 & 8950).
- : Allen Bradley ControlLogix Fundamental, Maintenance & Troubleshooting Course.
- : CMS Bentley Nevada 3500 Systems Operation and Maintenance Training by GE.
- : Basic Offshore Safety Induction and Emergency Training including Additional Norwegian Oil and Gas Modules (BOSIET, OPITO Approved, Vantage number: 1440661).

- : SIL/SIF Calculation using MARKOV Tool.
- : Schneider Electric PLC, Unity Pro training.
- : SimSci DYN SIM Process Simulation Software.
- : SCADA Expert ClearSCADA 2015 R2.
- : Invensys Turbo Machinery Control Training.
- : Environmental Health Safety and Sustainability Awareness Training.
- : Cyber Security Awareness Training.
- : Automatic Control (Salesian Institute "DON BOSCO" certificate).
- : PLC (Programmable Logic Control): ABB, Schneider Electric, Allen Bradley RS Logix trainings.
- : MATLAB Introduction (HIGH TECH. CENTER, Faculty of Engineering - Cairo University), MATLAB programming and MATLAB SIMULINK.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jun. 2017 till now
- Job title** : Lead Freelance ICSS Engineer
- Job Description** :
- Control Systems Specialist, Contract (Jun. 2017 – Current) - ERC Project: Owner representative for Plant Control systems function test and pre-commissioning activities:
Responsible for all UCP Packages (all process and utility packages with PLC/Controller system):
 - Conduct SAT activities for control system packages (Boiler/Heaters BMS, Compressors, Coke, Hydrocracker, reforming, HVAC...).
 - Site Integration Test (SIT) between main control room (MCR) & Instrument Electrical Shelters (IES).
 - All PLC packages Pre-Commissioning/ Commissioning activities follow up such as functional loop test, logic check and function test.
 - HIMA HIMax ESD system SAT, Logic check and function test activities.
 - Support Honeywell EPKS DCS system SAT, Logic check and function test activities.
 - Support rotating equipment VMS system activities and Startup/Shutdown/Surge function tests using TMC/CCC control for machinery control.
 - Assist in the development of control/safety strategies and software changes in Management of Change (MOC) and its implementation.
 - Lead ICSS Engineer for Chevron OASIS ISO2 Upgrade Project (Jul. 2019 – Oct. 2019): Triconex ESD systems engineering for new packages & upgrade of existing ISO MAX2 units.
 - Lead ICSS Engineer for Ras Tanura J28 Upgrade Project (Mar. 2019 – May 2019): Engineering of ESD, F&G Triconex systems upgrade from MSW to functional logic diagram.
- Dates** : From Nov. 2016 till May 2017
- Employer** : GS E&C
- Project** : Mostorod
- Job title** : I&C Engineer

- Job Description** : Conduct all SAT activities of control and safety instrumented systems which following systems:
- Honeywell EPKS DCS systems.
 - HIMA HIMax ESD system.
 - All Integrated control systems (Allen Bradley/Siemens PLC, Bentley Nevada 3500, CCC Anti-Surge/Performance Controller, Woodward Turbine Controller) for different process & utility packages:
 - Coker Furnace Package.
 - Hydraulic Decoking System.
 - Wet Gas Compressor.
 - Coke Handling System.
 - Reformer Recycle Gas Compressor.
 - Vibration Monitoring System (VMS).
 - H2 Make-up Gas Compressor.
 - NHT Recycle Gas Compressor.
 - H2 Rich Gas Compressor.
 - Nitrogen Compressors.
 - Regeneration Loop Comp.
 - DHT Recycle Gas Compressor.
 - DHT Make-up Gas Comp.
 - Steam Boiler BMS.
 - HVAC Control System.
 - Utilities Packages.
 - Field instruments Test/Inspection as per approved ITP.
 - Review and verify functional design of the Process Control Logic and ESD/FGS logic.
 - Participate in building function test procedure.
- Dates** : From Nov. 2011 till Nov. 2016
- Employer** : Schneider Electric, Invensys EEC Egypt, IPS Singapore
- Job title** : Senior Integrated Control & Safety Systems (ICSS) Engineer
- Job Description** :
- Execute project work scopes in accordance with customer requirements, corporate practices and project procedures and standards.
 - TMR (Triple-Modular-Redundant) SIL3 safety and critical control systems Design (TRICON / TRIDENT).
 - Prepare and submit Functional Design Specifications documents including system design and configuration based on design input documents/systems studies and/or site surveys.
 - Prepare, modify, review and submit project documents (FDS, Cross wiring & IO list, Loop drawings, typical documents, OTP (Operational Testing Procedure), FAT/SAT check list and procedures...).
 - Perform software logic coding and programming:
 - Creating the project library for custom typical (FB) based on the design input documents.
 - Logic implementation from Cause & Effect, Flow Chart Diagram, Vendor Narrative, Safety Instrumented Function (SIF) Narratives and P&ID drawings.
 - Upgrade MSW Ladder logic to FBD programming Language.
 - Conduct Factory Acceptance Test, and Site Acceptance test with Customers.
 - Process and logic Simulation using Emulator and DYNMIM process

- simulation software.
- Perform loop check and function test prior to commissioning.
- Perform on-site engineering start-up and application commissioning.
- Perform Integrated FAT, Function Test and familiar with the following DCS systems testing & operations:
 - Honeywell EPKS.
 - Emerson DeltaV.
 - Yokogawa Centum VP/CS3000.
- Ensure all project deliverables are of highest quality and meet the schedule and requirements.
- ESD (Emergency Shutdown Systems), PSS (Process Safety System), HIPPS (High-Integrity Pressure Protection System), F&G (Fire & Gas), BMS (Burner Management System) and Compressor/Turbine/Governor shutdown.
- All the engineering activities in software programming and hardware diagnostics and configurations:
 - System cabinets check for detailed layout and power distribution.
 - Calibration, loop checking and troubleshooting of field instruments.
 - Wonderware Intouch HMI development and configuration.
 - P2P, Modbus and OPC communication configuration and implementation.

Dates : From Mar. 2009 till Oct. 2011

Employer : Engineering and Services Technology “EAST Automation”

Job title : Automation Engineer

Job Description : Responsible for petrochemicals and power stations sectors and perform the following tasks:

- Control systems design, sizing and Engineering including instrumentation selection.
- Tenders study: study the tender specifications, device selection, estimate cost and required materials, verify standards, make site inspection when needed, get quotations for services and products required to achieve required specifications of the tender and negotiate payment, delivery and warranty conditions.
- Interface closely with customer to ensure that project requirements and expectations are fully satisfied.
- Coordinate, and control project management, engineering and procurement teams to execute the project scopes and meet delivery requirements.
- Technical support, site inspection, instrumentation selection, and solution provider for the company customers for the products and solutions of the following manufacturers:
 - ABB and Siemens Instrumentations: Flow, Temperature, pressure, gas analyzers, recorders, process controllers and Siemens Sinumerik CNC controls (ABB Flow Masters Training for flow instrumentations).
 - PLCs & Control Panels: Siemens, ABB and Allen Bradley.
 - Wonderware Intouch/ArchestrA HMI.
 - CAMILLE BAUER: Heavy current measurements (power monitors, power transducers, distribution system measurement, energy meters & load optimization), Process control (head transmitters, VG

recorder, temperature controllers) & Angular position instrumentation.

- ABB & Siemens motors and drives: LV induction motors, process performance motors, DC motors, AC & DC standard and industrial drives.
- NIVELCO: Level switches, Transmitters and liquid analysis instrumentations.
- Sartorius: Load Cells, Weighing Indicators, Weighing Controllers, Check Weighers, Batch Weighing, and Foreign body detection.

Dates : From Aug. 2008 till Feb. 2009

Employer : ICSP

Job title : Control Systems Engineer

Job Description :

- PLC: programming PLC devices (Compact & Modular) using ladder & FBD languages and hardware configuration, Triconex PLC software: TriStation 1131 v4.3, Allen Bradley software: RSlogix 5000 software and a brief background about HIMA (HIMATRIX) PLC.
- Study the project and make the required engineering design, with subject to the following technical issues in:
 - Instrumentations basic operation and fundamentals: Temperature Detection, Pressure Detection, Level Detection, Flow Detection, Position Indication and Radiation Detection.
 - DCS Systems Yokogawa CS 3000 and Emerson DeltaV.
 - Process control and control systems: Principles of control systems, elements and functions of automatic control systems, classifications of control systems and modes of automatic control (Proportional, Integral and Derivative "PID" modes), controllers and valve actuators (Pneumatic, Hydraulic, Solenoid & Electric motor actuators), Safety Systems & SCADA.

Field of experience :

- Working in different areas and work locations (office, staging, onshore and offshore sites) with different cultures and nations. Participating in many aspects of the job cycle including Bids Proposal, technical issues, preparing functional design specifications, interfacing with customer during all project phases, project and applications engineering, FAT, Integrated FAT, SAT, Loop check, Pre-Commissioning, Commissioning and start-up activities.
- Projects Achievements:
Successful of completion of different project with different scopes/phases starting from preparing functional design specification to engineering, FAT, IFAT, SAT, Commissioning and start-up activities:
 - ERC Refinery SAT for ESD and DCS systems with GS E&C Cairo, Egypt.
 - ETHYDCO (Egyptian Ethylene and Derivatives Company) with TOYO Japan.
 - CLOV FPSO Project with Total E&P and DSME in Angola (offshore).
 - JLXP Phase 3 Project MSDW and LHDC with ExxonMobil Singapore and Foster Wheeler.
 - Saudi Elastomers Project – U&O, Carbon Black and MTBE Decomposition Unit with SABIC and Daelim Korea.

- Petron Bataan Refinery (Philippine) with Daelim Korea.
- BALL MILL 105 IOC CONCENTRATE EXPANSION with Invensys Canada.
- Shutdown (ESD), for the E-STYRENICS, 200000 MTA POLYSTYRENE PLANTS with Invensys Egypt.
- F&G DETECTION SYSTEM OF Train 3 of ABU-DHABI-GAS LIQUEFACTION Co. with Invensys ME.
- Skills:
 - ESD & FGS: Triconex & HIMA HIMax.
 - DCS: Honeywell EPKS, Foxboro IA.
 - PLC: Allen Bradley, Schneider Electric and Siemens.
 - VMS: Bentley Nevada 3500.
 - TMC: Compressor Anti-surge & Performance control and Turbine Auxiliaries control.
 - HMI/SCADA: Wonderware & ClearSCADA.
 - Building Functional Design Specification and Engineering documents.
 - Factory/Site Acceptance Test (FAT/SAT).
 - Commissioning & Start-up activities.
 - Client assessment and analysis.
 - Data management.