

Best Technology Talent For Companies Around The World



Mohamed

SCADA Engineer

Summary

Sr. Automation & Industrial Software Engineer with strong expertise in SCADA development (Ignition, WinCC OA), PLC programming, IIoT connectivity, and MES implementation. Skilled in designing scalable automation architectures, SQL historian systems, and real-time data acquisition layers. Experienced in managing and executing full automation project lifecycles from system design and PLC/HMI development to FAT, commissioning, and client handover. Currently pursuing a Master's in Engineering Management, enhancing my capabilities in project leadership, planning, and technical decision-making for large utility projects.

TECHNICAL SKILLS:

- TIA Portal, Ignition SCADA (Gold Certified)
- Wincc OA, SoMachine V4.3.
- EcoStruxure Control Expert (Unity Pro)
- Vijeo designer 6.2.
- Electrical AutoCAD, EPLAN Electrical
- Ladder, SCL, C, Python
- SQL
- PLC, HMI
- Modbus RTU
- MES

Professional Career

Sr Automation & SCADA Developer

December 2021 – Present | Alexandria, Egypt

Project 1 Info:

Toshka Central SCADA

Responsibilities:

- Took a lead role in developing and integrating a large-scale SCADA system covering multiple operational zones, ensuring alignment of standards, smooth coordination between teams, and reliable control across numerous pump stations
- Develop and configure SQL servers for historian, reporting and management systems
- Prepared electrical and performance analysis reports in line with client KPIs
- Enhanced and adapted Ignition SCADA architecture to integrate new zones and improve system scalability

Project 2 Info:

Future of Egypt First Phase 218 Irrigation Pump Station

Responsibilities:

- Conducted a full technical study of the project specifications and engineered a complete automation and SCADA solution fully aligned with client requirements
- Optimized the design with a strong focus on cost efficiency, ensuring the solution met both technical and commercial constraints
- Participated in supplier engagement and supported negotiations to secure competitive pricing and optimal component selection, which contributed to winning the project
- Designed all control panel wiring diagrams using E-Plan and ensured full compliance with standards and project specifications
- Oversaw project execution, handling technical decisions, documentation, procurement coordination, and communication with all stakeholders
- Ensured high-quality implementation and on-time delivery, contributing significantly to project success and client satisfaction

Project 3 Info:

New Delta 1st and 2nd Phase 73 Irrigation Pump Station

Responsibilities:

- Conducted a full technical study of the project specifications and engineered a complete automation and SCADA solution fully aligned with client requirements

- Optimized the design with a strong focus on cost efficiency, ensuring the solution met both technical and commercial constraints
- Oversaw project execution, handling technical decisions, documentation, procurement coordination, and communication with all stakeholders

Project 4 Info:

Dimming System for Cairo/Ismailia Road lighting

Responsibilities:

- Manage the I&C scope within project execution
- Commissioning control system with lighting poles
- Troubleshooting of control system issue

Project 5 Info:

SCADA system for Gardenia city distribution system

Responsibilities:

- Engineered the complete SCADA solution for monitoring and controlling the medium-voltage switchgear
- Integrated Schneider protection relays using Modbus RTU, ensuring reliable communication and accurate real-time data acquisition
- Configured PLC/SCADA communication layers and mapped all relay parameters, alarms, and measurements into the SCADA system
- Designed the system architecture and communication topology to ensure robust operation and seamless expansion

Project 6 Info:

Abu Rudeis RO-Seawater treatment

Responsibilities:

- Manage the I&C scope within project execution
- Review electrical and P&ID drawings to extract the I/O list
- Preparing BOQ for I&C scope and follow-up order with vendors

Software and technologies:

PLC and HMI applications (Siemens & Schneider), Ignition, WinCC OA, RTU, and industrial network systems.

Instrument & Control Engineer

July 2020 – November 2021 | Alexandria, Egypt

Project 1 Info:

Kafer Hanot and Qasr El Gebaly Pump Station

Responsibilities:

- Installing and commissioning instruments
- Programming PLC and commissioning control panel with other equipment in field

Project 2 Info:

Al Alamein Wastewater Treatment plant

Responsibilities:

- Installing and commissioning instruments
- Design wiring diagram for control panel and MCC, programming PLC and commissioning control panel with other equipment in field

Project 3 Info:

Luxor Filtration System for water treatment

Responsibilities:

- Installing and commissioning instruments
- Design architecture and topology for the control system
- Design wiring diagram control panels, programming PLC, HMI, and commissioning control panel with other equipment in field

Project 4 Info:

15-MAY Wastewater treatment

Responsibilities:

- Installing and commissioning instruments
- Design architecture and topology for the control system
- Design wiring diagram for control panels, Programming PLC, HMI, and commissioning control panel with other equipment in field
- Programming PLC for belt press control panel

Project 5 Info:

Haya Karima Lifting and wastewater treatment Stations

Responsibilities:

- Design architecture and topology for the control system
- Design Wiring Diagram for control panels

Education

2014 – 2019

Alexandria Higher Institute of Engineering and Technology

Bachelor's Degree in Mechatronics Engineering

Master's Degree in Engineering Management (ongoing)

Certificates:

- Ignition 8.1 Gold certificate
- Wincc OA Basic Training

Foreign Languages Skills

English: Upper-Intermediate

Arabic: Native