

101076-CSX-57Diu-E-2016
Control Systems & Automation Engineer

Holds B. Sc. in Electromechanical Engineering and M. Sc. in Renewable Energy Systems. Has about 2 years experience working as Control Systems & Automation Engineer in UK.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 21/11/1992
Gender : Male
Marital Status : Single
Residence : Alexandria

EDUCATION

- : B. Sc. in Electromechanical Engineering, Alexandria University, 2016
- : M. Sc. in Renewable Energy Systems, Loughborough University, UK, 2017-2019 (European Masters in Renewable Energy with a Specialization Diploma in Renewable Energy Facilities and Grid Integration from University of Zaragoza, Spain)

LANGUAGES

Arabic : Native Language
English : Fluent
French : Basics
German : Basics

COMPUTER SKILLS

- : Windows, MS Office, Internet
- : Siemens TIA Portal Step 7 WinCC PLC HMI (PLC-S), SIEMENS S7 – 1200/1500 PLC, SCADA, ReSoft Ltd WindFarm, Solid Works, Ansys 18, AutoCAD, PSCAD, iHOGA, DIgSILENT / PowerFactory, OCTAVE, Arduino, Revit MEP, Industrial communication (CAN bus, Modbus RTU-RS485, Modbus TCP, MQTT, Profinet, Profibus) and VPN industrial remote Access
- : Programming Languages: MATLAB, C, Python, PLC Programming (LAD, FBD, SCL, STL, HMI, GRAPH)

TRAINING COURSES AND CERTIFICATIONS

- : Internship at European Egyptian Pharmaceutical Industry, Egypt (Dec. 2018):
 - Sizing a rooftop solar farm producing 150KWp electricity integrated with

- the grid.
- Carrying out environmental analysis to calculate the solar potential.
- Sizing electrical components such as inverters with MPPT to achieve the maximum Power from PV modules.
- Load flow, Short circuit, Transient voltage and frequency studies to determine the optimum coupling point with the system network and the electrical grid.
- : Online Course on Electric Industry Operations and Markets, Duke University (Jul. 2018).
- : Online Course on Solar energy, Delft University (from Apr. till Jun. 2018).
- : SCADA WINCC Flexible course, MAS Automation Centre, Cairo (Dec. 2016 – Jan. 2017).
- : PLC SEMATIC S7 BASIC & ADVANCED Course, MAS Automation Centre, Cairo (Dec. 2016).
- : HVAC Advanced Supplement Course, Alexandria University, The Engineering Centre (Sep. 2016).
- : Design of Central AC System (Advanced), Alexandria University, The Engineering Centre (Aug. 2016).
- : Power Distribution Advanced course, Alexandria University, The Engineering Centre (Aug. 2016).
- : Internship at The Engineering Automotive Manufacturing Company "EMACO" (Aug./Sep. 2014).
- : CITB Test Certificate, Certified Strength and Conditioning Specialist (CSCS).
- : Udemy certificate, Siemens TIA Portal Step 7 WinCC PLC HMI (PLC-S).
- : English: IELTS.

CHRONOLOGICAL EXPERIENCE RECORD

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| Dates | : | From Apr. 2019 till Jan. 2021 |
| Employer | : | Smart Power Systems, UK |
| Job title | : | Control Systems & Automation Engineer |
| Job Description | : | <ul style="list-style-type: none"> • Installing, Programming, testing and developing renewable residential grid units at a site called CORBY EUTOPIA, UK. • Developing smart grid and microgrid products and services for meeting the power demands of residential and commercial units in smart cities and communities. • Finding the best technical solutions for control and communication systems for renewable energy systems: PV Solar Farms, Wind Farms, energy storage systems and electric vehicle charging infrastructure. • Installation and programming PLC devices from Siemens, Delta, and Hitachi, using software tools such as TIA Portal, WPLsoft, CodeSys and others. • Designing and implementation of different Network Architecture and Communication protocols, especially Modbus RTU. • Developing bespoke control system software for Energy Management Systems. • Defining the technical requirements, organizing main communication network equipment necessary for interconnection and communication of control devices, and configuring settings for LAN, WIFI and GSM/GPRS. • Work within a team consisting of clients and power systems engineers to |

- test and commission final product setup.
- Meeting with customers for negotiation and defining bottom lines and requirements of proposed projects.