



MOHAMMED ABUBAKER

SENIOR AUTOMATION ENGINEER

University of Khartoum
Jan 2017 - Dec 2018

Sudan University of Science
and Technology
Oct 2010 - Nov 2015

M&Z Engineering
Jan 2020 - Current

M&Z Engineering
Jan 2018 - Jan 2020

EDUCATION

Master of Engineering Management
First Class

Bachelor's Degree in Electrical Engineering
Major in Electrical Control Engineering

EXPERIENCE

Senior Automation Engineer

- Managed all company service teams
- Conduct day-to-day Services coordination, planning, and implementation across multiple teams
- Create functional and technical report documents
- Conduct in house automation training for customer engineers
- Along with some old position duties

Automation Engineer

- Co-Managed complex projects from start to finish
- Collaborated with other integrators
- Translated requirements into polished, high-level design
- New systems programming in projects according to customer's needs
- Modifying existence systems to improve productivity or to solve problems
- PLC, SCADA, VSD, Motors, Controllers, Sensors and instrumentation configure, maintain and troubleshoot.
- Electrical Drawings and Schematic design using EPLAN and PCSCHMATIC
- SCADA Design using various applications
- Experienced in Siemens PLCs and HMI using both SIMATIC Manager and TIAPortal
- Good knowledge in communication protocols, e.g. Profibus, Profinet and OPC

Khartoum Refinery Company
May 2016 - May 2017

Electrical and Instrumentation Engineer (Under Training)

Electrical and Instrument Maintenance Department:

- Basic PLC programming
- Basic DCS configuration
- Basic valves and transmitter's maintenance and troubleshooting
- Configuring transmitters and positioners
- Configuring temperature and pressure controllers
- Basic gas and steam turbine operation knowledge

HSE Department:

- General safety awareness
- Safety inspection
- Permit work system
- Incidents causation, investigation and reporting
- Environment awareness
- Hazard Risk Assessment
- Firefighting technique

PROFESSIONAL COURSES

Studio 5000 Logix Designer Level 2:

Basic Ladder Logic Programming

SIMATIC TIA Portal Structured Programming

- Fundamentals of the programming
- Introduction to the programming of SIMATIC S7
- Introduction to the programming language FBD/LAD/STL
- Introduction to the programming language SCL
- Introduction to the programming language GRAPH

PROFINET

- Device types
- Profiles
- Transmission modes
- Network topologies
- Connection technologies
- Addresses
- Diagnostics
- Security

PROFIBUS in process automation

- Master-slave principle
- Transmission technology
- Protocol architecture

Rockwell Automation
29.05.2020

Siemens Digital Industry Academy
13.05.2020

Siemens Digital Industry Academy
08.05.2020

Siemens Digital Industry Academy
27.05.2020

Siemens Digital Industry Academy
07.05.2020

PLCs for beginners

- From relay to PLC
- PLC Tasks
- Basic Terms
- Function Units
- Software
- Logic operations
- Program processing
- Arithmetic operations
- Introduction to the programming of a PLC- FBD, STL and LAD programming
- Creating a PLC program

Siemens Digital Industry Academy
28.05.2020

Basics of Drives - Motors

- Synchronous motors
- Asynchronous motors
- Reluctance motors

Siemens Digital Industry Academy
28.05.2020

Basics of Drives - Converters

- Mains and converter operation
- Operation at constant and variable speed
- How it works
- Energy flow
- Control modes

Siemens Digital Industry Academy
27.05.2020

Process control engineering for beginner

- Knowledge of the process
- The automation hardware
- The automation hardware
- Operator control and monitoring

Siemens Digital Industry Academy
08.05.2020

SITOP - Power supply in the TIA Portal

- Introduction to SITOP power supply
- SITOP PSU8600: modular power supply system with complete TIA integration
- SITOP UPS1600: The open and system-integrated DC-UPS

Omron Automation eLearning
29.05.2020

Introduction to Factory Automation

Omron Automation eLearning
30.05.2020

Basic Motion Control

IO Training Center
Khartoum, Sudan
Mar 2016 - Jul 2017

Automation Training Program

- Classic Control (MCC)
- PLC Basic (Siemens)
- PLC Advanced (Siemens, LG, Delta and Mitsubishi)
- Variable Speed Drive (Drivers)
- Human Machine Interface (HMI)

Occupational Safety and Health Administration (OSHA)

- OSHA Compliance Safety Training Passport.
- 30 Hours training program in Occupational Safety and Health Administration (OSHA) – General Industry Compliance.

Electrical Safety

- Electrical Safety
- Fire Alarm
- Fire Fighting Systems

Artificial Intelligence

Embedded Control Systems

- MATLAB
- Micro-controller Advanced Architecture and Programming
- Arduino Advanced Architecture and Programming

SKILLS

- Machinery troubleshooting and maintenance
- PLC Programming and Troubleshooting
- SCADA Design
- Electrical Drawings
- Panels Building
- Instrumentation

CONTACT

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Experts for Training and Human
Resources Development Center
Khartoum, Sudan
Dec 2015

Sudan University of Science and
Technology - College of Engineering
Training Center
Khartoum, Sudan
Dec 2015

International Islamic University
Kuala Lumpur, Malaysia
Sep 2014

Brain Growth for Training
Khartoum, Sudan
Jul 2013 - Aug 2013