**EHTSHAM**

**Instrumentation & Control Engineer**

Experienced-03 Years

B.Sc. in Electronics Engineering

PEC Approved

[Ehtsham.379600@2freemail.com](mailto:Ehtsham.379600@2freemail.com)

**OBJECTIVE**

With valuable field experience in automation and control projects along with vast exposure to the field of electronics, I find myself worthy of a more responsible position to take up the challenges where I can enhance my career along with the achievement of on job goals.

**EXPERIENCE**

**Electronics Engineer at National Institute of Electronics (Jan 2016-Jan 2018)**

* Experience on Omron PLC CPM2A, CJ1M & also on Siemens Simatic S7-1200 with TIA portal.
* Experience of programming HMI by DELTA
* Used Trace mode SCADA to control processes in industrial projects
* Ladder Logic Programming & Implementation on Omron/Siemens PLC.
* Advance Automation of Mixing Plant through PLC and SCADA Integration & using RS-232 Communication Protocol
* Use of Analog Sensors with PLC set at 0-20mA or **4-20mA** range settings and Use of Scaling commands if needed for **higher resolution**
* Use of SCADA for 1-to-1 PC-link Communication to send or receive data between PLCs
* PLC Ladder Logic Programming of various complex industrial systems
* Implementation of Wireless SCADA for the mixing plant over Wi-Fi Network
* Use of Ethernet in SCADA system
* HMI integration with PLC for various multi-security levels for different level users in an Industrial Control System
* Use of HMI for different operator Panels
* Automation of **Elevator control** system for different floors.
* Programming of Scrap Loading Crane and its control via SCADA to control it manually from SCADA or automatically via different digital sensors
* Control of Traffic Signals System through PLC Ladder Logic Programming for manual or automatic operation
* Automated Ware HouseDoor **Control System**
* Programming & Commissioningof Conveyor BeltSystemat **Islamabad International Airport**
* To automate the packaging system for apple/orange industry where two conveyor belts are controlled (one for box & one for apple/orange etc). Fixed number of items are packed in each box automatically through PLC Control and use of sensors
* Automation of bottle filling project which involves sensors interfacing with micro-Controller
* Gained practical experience on automation projects based on PIC Microcontrollers, Arduino, Atmel.
* Interfacing hardware with microcontrollers.
* C, C++ Language Programming PIC and interfaced it with a push button touch panel, burned the program into controller using Super-Pro programmer
* Programming microcontrollers (ADC module, LCD interfacing, Use of Timers, Counters)
* Programming LCD module in C-language, which involves LCD initialization, Showing output, moving cursor to the desired position.
* Making an ADC module in C-language which involves analog signal reading by the controller, use of control registers to select analog input channel
* Converting analog signal and displaying it on LCD
* Performing site visits and meetings for assessment of client’s requirements, planning the work flow, assigning technical and drawing works, preparing progress reports, finalizing the payment terms and deliveries.
* Worked as an Instructor for Advanced Industrial Automation Courses which involve PLC, HMI & SCADA
* Involved in the process of commissioning, evaluation and final proposal of solutions to the clients.

**Pakistan Tobacco Company as Electrical Contract Engineer (Sep 2015-Dec 2015)**

* Fault analysis of conveyor motors
* Assuring proper work of UPS/DC Batteries
* Handling technical queries and clarification
* Automation and energy intelligence system installation for energy meters, water meters and UPS
* Preparing method statements, Job safety analysis and solving the technical problems at site
* Inspection of earthing system, lighting, power outlets, distribution system in buildings
* Taking lead with the overall technical documentation in the engineering departments
* Installation and testing commissioning of LV systems.
* Installation and control of pumps, motors, AHUs, lighting, all electrical and MEP work in buildings.
* Providing the solution for communication problems between modules, PLC and CPU.
* Supervision for Quality of Works and Material.
* Quality and Safety checking as per ISO 9001, 14001 and 18001 standers.

**DESCON Engineering Ltd. Lahore as a Trainee**

* Proposal Management, Project Design/Efficiency
* Client Requirements, Contractor Selection
* Coordinating the testing, inspection, calibration, and repair of all system protection devices, remote terminal units (RTUs), transducers, and other protection equipment including electro-mechanical and electronic relays, protective controls, power line carrier (PLC) equipment, switchboards, and other substation equipment such as Supervisory Control and Data Acquisition (SCADA) units.
* Maintain all records associated with substation relaying equipment and associated devices.
* Coordinate modifications of existing equipment, as requested, and ensure modifications are performed in a timely and professional manner.

# **PROFESSIONAL TRAINING**

**Advanced Industrial Automation Training** from **National Institute of Electronics Islamabad Pakistan** which includes:

* Orientation of PLC
* Advance PLC Programming
* PLC integration with HMI & SCADA
* Advance SCADA Development

**Solar PV System Training** from ISRA University Islamabad

* Designing Solar PV System for different Loads & atmospheric conditions
* Installation of Solar System
* Maintenance & Repair of Solar PV Systems

**EDUCATION**

**University of Engineering and Technology Taxila, Rawalpindi**

**BSc. Electronics Engineering 2011 – 2015**

* + - * Water level detector(on pcb board, bread board)
      * Hamming Code (Encoder/Decoder) using Verilog Programming Code and its implementation on FPGA kit Board (Spartan 3) using Xilinx Programming Software
      * Fan speed controller
      * General module kit for Lab experiments
      * LCD interface with micro-controller
      * FYP: UPQC (Unified Power Quality Conditioner)

**Professional Affiliation**

Registered Engineer with **Pakistan Engineering Council (PEC)** as a **Life Time** Member**.**

**COMPUTER SKILLS**

* Engineering Application Softwares: Orcad, C, C++, MicroC PRO for PIC, MATLAB, Modelsim (Verilog), Xilinx (FPGA), Proteus, MicroCpic, CX-Programmer, TIA Portal, DELTA HMI Editor, Tracemode 5.0
* MS Office, Windows XP/98, Windows 7, Windows 8/8.1 including Basic Computer Skills

**OTHER SKILLS & ACTIVITIES**

* Excellent leadership and Communication Skills, Decision Power, Team Management
* Member of Pakistan Boys Scouts Association (Quaid-e-Azam Scout Certificate)
* Fluent in English, Urdu

**References**

* Will be available upon request