KHAWAJA **ANEEQ**

Electrical Engineer

ENFP-T

Islamabad, Pakistan

(+92) 300 8357316

aaneeq21@gmail.com

aaneeq21.github.io

aaneeq21

aaneeq211

About me

I have a progress and result-oriented personality with a keen interest in self-improvement, cooperation and community development. As far as my technical curiosity is concerned, I have a passion to understand and design systems which can "elegantly" solve problems.

Education

Bachelors of Electrical Engineering 2015-2019

School of Electrical Engineering & Computer Sciences
National University of Sciences & Technology

Intermidiate 2013-2015

F.G. Quaid-e-Azam Degree College, Chaklala
Rawalpindi

Matriculation 2011-2013

F.G. Quaid-e-Azam Degree College, Chaklala
Rawalpindi

Co-curricular

General Secretary 2018-2019

Nust Dramatics Club

Rectors High Achiever 2017-2018

Best Script Writer ~National Level Contest

President TEC MOS Certifications 2017-2018

Microsoft Office Specialist Certification

Technical Skills

Programming

-C, C++, C#, HTML, CSS, Java, Python, MATLAB, SQL

Electrical Design

-Multisim, PSpice, Proteus, Altium, Adobe Eagle, DAQ NI, AutoCad Electrical, LAB view, Simulink, SEE Electrical

Automation

-Win ProLadder, Easy Builder Pro, Arduino, Raspberry pi, Fatek PLC, Mitsubishi PLC, Wintek HMI, Servo Drives, VFDs, PID controllers

Other

-Microsoft certified Office specialist, Photoshop, Illustrator, XD, Premier Pro

Experience

Embedded System Intern Sep 2017- Jun 2018

Noerric Technologies Inc.
-developed a system for data collection for an AI based product using Raspberry Pi.
-worked on Nvidia Jetson Tx2

Project Manager July 2018- Aug 2018

Strong Packages
-managed deployment of new production line
-from clearance to placing machinery and Positioning
-designed all electrical distribution connections and supervised whole implementation

Electrical Design Engineer July 2018- Aug 2018

Tycoon Bottles
-upgraded their old Blow molding machine. replaced pcb with PLC and HMI and made it automatic.
-designed and manufactured a chiller, closed loop feedback system to maintain a certain temperature.
-upgraded compressor system to VFD from old on/off mechanism which reduced a considerable amount of power consumption.

Maintenance Engineer Aug 2019- Present

Strong Packages
-responsible for managing whole team of technicians.
-planning and implementing maintenance shutdowns.
-upgrading and designing different control systems and automations.
-worked on PID controllers, VFDs, PLCs and HMIs.
-Implementing TPM in organization, which includes condition based and predictive maintenance.

Industrial Projects

Energy Management System

-development of energy management system. By power analyzer of Schneider we have values of all kind of electric parameters which through a raspberry pi transmitted a local server where our back end program use those values to show runtime values and make reports through it.

Auto Blow Molding Machine

-development and manufacturing of auto blow molding machine. This machine blows preforms made of PET and made bottle of it. This is operated by PLC and HMI.

PET strap cutting machine

-development and manufacturing of PET strap cutting machine. This machine cuts very precise lengths of continuous PET strap. This is operated by PLC, HMI, Servo Motor and magnetic sensors.

Pressure Maintaining Control System

-this system reads the signal from pressure sensor and displays run time pressure value. and to maintain present value to set value speed of motor is adjusted accordingly through VFD by PLC.

Projects

Vision Based Localization of unmanned aerial vehicles

-Computer vision based localization solution for UAVs using deep learning models. deployed on Nvidia Jetson TX2.
-Final Year Project.

SMART, Home Automation System

-SMART is an home automation system build on 89c51 microcontroller and can communicate through Bluetooth, IR remote. through which relays will actuate and run 220V AC appliances.
-Microprocessor Systems

Face Recognition Attendance System

-Runtime Attendance system through face recognition by cameras placed on door, using Raspberry Pi.
-Embedded Systems

Heart Beat Pulse Plotter

-Runtime heart beat plotter using IR sensor and Arduino UNO. Displaying beats per minute and plotting the graph.
-Microcontrollers

Automatic Gear Controller

-Arduino based automatic gear shifter according to speed.
-Microcontrollers

Modelling 802.11b Wifi Protocol

-Modelling of 802.11b IEEE Wi-Fi protocol on MATLAB and Simulink.
-Communications Systems

Modelling QPSK

-Modelling of Quadrature Phase Shift Keying on MATLAB and Simulink.
-Complex Variable Transform

Smart Car Parking Management System

-Car parking management system counts the no. of vehicles inside a block in parking as well as whole parking. it also gives nearest empty slot address. All made by using simple logic gates.
-Digital Logic Design

Mobile Phone Detector

-Circuit which detects any kind of 2G incoming and outgoing signals and activate an alarm on that.
-Electric Network Analysis

RFID based Lock

-RFID tag based solenoid lock using Arduino UNO.
-Electric Network Analysis

Color Switch

-Color switch game made by using C++ and glass.h for GUI.
-Object Oriented Programing

Graphing Calculator and Equation Solver

-Calculator for complex equations and plotting graphs using C language.
-Introduction to Programing

Skills

- Problem Solver
- Team Management
- Project Management
- Resource Management
- Time management
- Good Communication Skills
- Efficient Researcher

Languages

- English
- Urdu

Hobbies

- Squash
- Volley Ball
- Graphic Designing
- Reading Poetry
- Tech Documentaries and blogs