

MUHAMMAD USMAN

House # 2042, Street # 69, Sector I-10/1, Islamabad
Email: m.usmangul95@gmail.com
Mobile: 0306-5588127

Career Objective

A committed BSc Electronics Engineer with a sound understanding of concepts related to Electronics Engineering with special interest in Embedded Systems design, communication systems, signal and image processing and utilizes sound organization and planning skills to deliver assignments within set timeframes and to a high quality standard.

Personal Details

PEC Registration No.	ELECTRO/26570
Father's Name	GUL MAHI
Date of Birth	June 28, 1995
Nationality	Pakistani
Domicile	Chakwal (Punjab)
CNIC #	37203-9721676-3
Religion	Islam
Marital Status	Single

Education and Qualifications

2017 Bachelor of Science in Electronics Engineering

University of Engineering and Technology, Taxila
CGPA: 3.34/4.00

2013 Intermediate (Pre Engineering)

Punjab College, F-8/4 Islamabad
Federal Board of Intermediate and Secondary Education, Islamabad
Marks: 913/1100 (83 %)

2011 Matriculation (Science Group)

Islamabad Model College for Boys, I-10/1 Islamabad
Federal Board of Intermediate and Secondary Education, Islamabad
Marks: 934/1050 (89 %)

Professional Experience

- ❖ 2 Months internship at NDC Pakistan (National Development Complex)
Project: 1st Step PID Implementation on Arduino (for inverted Pendulum)
From: July 23, 2016 To: September 23, 2016

Graduation Projects

❖ **Final Year Project (FPGA Based Floating Point Processor for Image and Video Applications)**

Arithmetic circuits play an important role in digital systems. Realization of complex digital circuits is possible with development in very large scale integration (VLSI) circuit technology. The purpose of this project is to implement FP arithmetic unit using half-unit biased (HUB) formats for image and video applications. At 1st stage, FP arithmetic unit with efficient resource utilization was designed using the HUB format. At 2nd stage, this ALU was tested thorough simulations and hardware debugging on FPGA kit (Nyxes-4). At 3rd stage, a system was designed where user can send the image from MATLAB to FPGA kit and then receive the output image after FP processing from FPGA back to MATLAB. Serial communication was employed using Micro Blaze.

❖ **Robotic Arm**

❖ **Blind Source Separation of EEG Signals for Brain Computer Interface**

❖ **Other Projects**

- Reconfigurable Line Encoding Schemes on FPGA
- Implementation of Local Derivative Patterns for Image Classification
- Reconfigurable Local Patterns on FPGA
- 5 volt Power Supply using Zener Diode
- Computerized Voter list Software using Turbo C++
- Burglar Security alarm using Laser light
- 8 bit ADC and DAC using Op-amp and resistors only.
- Digital Dice using counter

Computer and Programming Skills

- | | |
|--------------|----------------------------|
| ❖ MATLAB | ❖ OrCAD |
| ❖ Vivado | ❖ Ladder Logic Programming |
| ❖ Xilinx ISE | ❖ Turbo C++ |
| ❖ Proteus | ❖ Atmel AVR Studio |
| ❖ Modelsim | ❖ MULTISIM |
| ❖ uVision | ❖ MPIDE |

Areas of interest

- ❖ FPGA Based System Designing
- ❖ Embedded Systems
- ❖ Computer Vision
- ❖ Computer Programming
- ❖ Communication Systems
- ❖ Industrial Automation

Extra-Curricular Activities

- ❖ Watching Cricket
- ❖ Reading Newspaper
- ❖ Internet Surfing
- ❖ Listening to Scholars

REFERENCES:

Will be provided on demand.