Tayyab Khan

Electrical (Computer) Engineer

Email: tayyabahmad.khan9@gmail.com
Phone: (+92) 306-5578580, (+92) 311-5146917
Address:H # 212, Street A-1, lane 3 Ch.Walyet Colony Chaklala Scheme-3 Rawalpindi, Pakistan

Areas of Expertise:

- FPGA Designing
- Programing in Microcontroller
- MATLAB Scripting
- Circuit Designing
- PCB Manfacturing
- Routing & Switching
- Image Processing
- Project Leadership and Management

Technical Skills:

- Xilinx ISE Design Suite
- AVR Studio, Proteus Design Suite, Atmel Studio 7
- Altium Designer, KiCad, NI-Multisim, Dip trace, OrCAD
- Eclipse, NetBeans
- Verilog, C, C++, JAVA
- Assembly language
- Microsoft Office Suite (Word, Excel, Powerpoint)
- AutoCAD, Corel Draw

PROFESSIONAL EXPERIENCE & PROJECTS

National Institute of Electronics, Rawalpindi, Pakistan — **August 2017- September 2017**
Role: Interned as Lab Staff Assistant

- Learned various steps, that are required to make Professional multilayer PCB board

COMSATS University Islamabad — **March 2017 - May 2018**
Final Year Research Project

Project Title: Comparative Analysis of FPGA Implementation of Various Cognitive Radio MAC protocol

Purpose: Implemented well known CR-MAC protocols on FPGA & make their comparative Analysis

- Used ISE design suite to convert CR-MAC protocols in hardware language
- Scripted MATLAB protocols to be converted to Verilog (hardware) language
- Implemented CR-MAC protocols on FPGA Virtex-6 FPGA (ML605-Evaluation Kit)
- Verifying results by hardware CO-simulation by using Xilinx System Generator

Outcome: Determined which MAC protocol is most efficient on FPGA hardware

COMSATS University Islamabad — **September 2017 – December 2017**
Semester 7 Project

Project Title: Digital Camera Interfacing with FPGA using VGA and monitor device

Purpose: Design a digital camera system camera interface for FPGA hardware

- Used OV7670 CMOS camera module
- Utilized the hardware language: Verilog

Outcome: Took video at real time with Nexys-2 Xilinx Spartan 3E FPGA board and display on LCD

COMSATS University Islamabad — **September 2017 – December 2017**
Semester 7 Research Project

Project Title: Segmented optical disk from Retinal eye image by using k-mean clustering

Purpose: Help diagnose ophthalmologic disorders by extracting optical disk from retinal eye image

- Applyied image processing technique such as Gaussian Directional Smoothing, k-mean clustering, and converted segmented image into binary image using MATLAB.

Outcome: Successfully extracted optical disk from retinal eye image with 90% accuracy

COMSATS University Islamabad — **February 2017-June 2017**
Semester 6 Competition Project

Project Title: Line Maze Solving Robots (using Bluetooth)

- Two line following robots tagged as Master and Slave were developed.
- Master Solved the line maze and sent the solution to slave over Bluetooth to follow-up directly to maze-end.

Outcome: Participated & my team and I were selected as Runner-up in Robian'17 (COMSATS Robotics Contest)

Tayyab Khan

Electrical (Computer) Engineer

Email: tayyabahmad.khan9@gmail.com
Phone: (+92) 306-5578580, (+92) 311-5146917
Address:H # 212, Street A-1, lane 3 Ch.Walyet Colony Chaklala Scheme-3 Rawalpindi, Pakistan

EDUCATION

COMSATS University Islamabad **September 2014 – June 2018**
Degree: B.Sc. Electrical (Computer) Engineering
CGPA: 3.20/4.00

The skills I gained from this degree were Digital Signal Processing, Digital System Design, Digital Image Processing, Microprocessor Systems and Interfacing, Digital Logic Design, Object Oriented Programming, Data Comm. and Computer Networks, Electric circuit Analysis and elaboration on different types of Electronics

Pakistan Advance College of excellence (PACE) Sadder, Rawalpindi
F.Sc (Pre-Engineering)
Grade: A
Modules: Physics, Chemistry, Mathematics

F.G Sir Syed Boys Sec School The Mall, Rawalpindi
Matriculation
Grade: A
Modules: Physics, Chemistry, Mathematics, Biology

LANGUAGES

English
Urdu
Punjabi