

# SUMBAL IQBAL

Email: [sumbal.iqbal@seecs.edu.pk](mailto:sumbal.iqbal@seecs.edu.pk), [sumbal.iqbal@iiu.edu.pk](mailto:sumbal.iqbal@iiu.edu.pk)

PEC Registration No: ELECTRO/19252

## Objective

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Looking for a career in a reputed organization/institution that provides me best opportunities to polish my research capabilities, to gain quality work experience and to develop managerial and technical skills in a competitive and professional environment for fulfillment of my goals.

## EXPERIENCE

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### International Islamic University Islamabad (IIUI), Pakistan

**TRA / Lecturer** (From 15-05-2014 to date.) ([http://www.iiu.edu.pk/index.php?page\\_id=2062](http://www.iiu.edu.pk/index.php?page_id=2062))

- Applied Calculus
- Calculus-I
- Introduction to Computer
- Calculus & Analytical Geometry
- Digital Signal Processing
- Embedded Systems
- Complex Variable & Transform
- Microcontroller and Microprocessor
- Circuit Analysis
- Linear Algebra

**Lab Engineer** (From 15-05-2014 to date.) ([http://www.iiu.edu.pk/index.php?page\\_id=2062](http://www.iiu.edu.pk/index.php?page_id=2062))

Currently working as **Lab Engineer** in the Department of Electrical Engineering, Faculty of Engineering and Technology. Taught the following Labs.

- Digital Logic Design Lab
- Microprocessors and Microcontrollers Lab(8051, AVR, PIC)
- Embedded Systems Lab (8051, AVR, PIC Microcontroller )
- FPGA based system design lab using Verilog HDL (Simulation and Implementation)
- Digital Signal Processing Lab
- Antenna Design and Wave propagation Lab
- Professional Engineer (Pro-Engineer 4.0)
- Circuit Analysis Lab

### National Development Complex (NDC), Islamabad, Pakistan

**Intern** (From March 2013 to June 2013)

Completed final year Project “Hardware implementation & performance evaluation of synchronous & GALS processor (Globally Asynchronous & Locally Synchronous) on FPGA “

**Intern** (From June 2012 – August 2012)

Gained experience on different microcontrollers. Worked on project “Gas Alarm Detector “

### PTCL

**Intern** (From June 2011 – July 2011)

## ACADEMIC BACKGROUND

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## Master of Science (MS) Electrical Engineering (Year 2016)

Specialization in Digital System and Signal Processing

## B.S Eng. Electronic Engineering (Year 2013)

### PROJECTS

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- Formal Functional verification using nuSmV Model Checker
- Natural Gas Alarm Detector (using PIC18F )
- Multi-operand Approximation
- Designed Helicopter using PRO-E
- Designed transistor type tester
- Designed Variable Power supply
- DTMF controlled Robot (using AVR )
- Remote control car using Matlab
- Created calculator and address (using C++ Language)

### SOFTWARE AND LANGUAGE SKILLS

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- Xilinx 14
- Microsoft Visual C++ 6.0
- Spyder
- PSpice 9.1
- AvrStudio
- Keil
- MPLAB
- PRO-E
- Multisim
- Matlab 12
- Proteous
- CCstudio
- Adobe Photoshop CS4
- LabView
- ModelSim 10

### TECHNICAL HARDWARE SKILLS

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- MICRO CONTROLLERS: Arduino, PIC18F, 8051
- FPGA: SPARTAN 3E, Virtex
- PSoC3 and PSoC5
- DSP : TMS320CS6173, Speedy33

### Managerial Experiences

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- Chair media & photography of IEEE SEECS PG Society.
- Department Coordinator at NAYS IIUI Chapter.
- Member of GREEN Society.
- Member of Event Management Society.
- VICE PRESIDENT of STEI 2013.
- Organizer in OPEN house IIUI, 2011 & 2012.
- Organizer of social events held in FET department, IIUI.
- Organizer at South Asian Youth Conference, 2012