CURRICULUM VITAE
Engr. Asad Asif

Electrical Engineer
Air University, Islamabad, Pakistan
Email: asifasad9@gmail.com
Contact: 0345-5277364

ACADEMIC BACKGROUND

DEGREE	INSTITUTION	YEAR	CGPA/DIV
BEE (Electronics Engineering) **(Embedded system, Control system)**	Air University, Islamabad, Pakistan	2014 – 2018	3.09
Diploma of Associate Engineering (Electronics)	International Islamic University Islamabad, (IIUI) Pakistan	2012-2014	1st Division
FSc. Pre-Engineering	FBISE, Pakistan	2010-2012	2nd Division
Matriculation	FBISE, Pakistan	2008-2010	1st Division

RESEARCH INTERSET

Control Systems, Sensor Fusion, Optimization, Implementation of Control Algorithms

INTERNSHIP AND TRAINING

Equipment Testing at CARE, Pakistan
Organization: CARE (Center of Advance Research in Engineering and Technology), Islamabad, Pakistan
Duration: 7 weeks
I was working as an Equipment testing engineer, with a team of 4 members. My Objectives were to test the radio equipment and analysis of RF Amplifiers performance and efficiency.

PROGRAMING AND EMBEDDED SKILLS

- **Programming:** C/C++, MATLAB, Verilog, VHDL, PLC programming, Embedded C.
- **Embedded System:** DPS board programing, Microcontroller (8051, AVR, PIC), Arduino, FPGA boards, I2C Protocol, RS232, DC motors, Inertial Measurement Unit (IMU), PWM.

MAJOR SEMESTER PROJECTS

1. **4-Bit ALU using Discrete Gates**
   In this projects, I designed a small ALU (4 bit) for addition, subtraction, multiplication, AND operation, OR operation and NOT operation using only LM series Logic Gate ICs.

2. **Audio Amplifier and Frequency Analyzer**
   In this project I designed a three stage audio amplifier with noise reduction filter. A frequency analyzer was designed and output were observed on led bar graphs.

3. FM Radio Transmitter

In this project, I designed a small range radio transmitter with a variable frequency range lay in FM band.

4. DC Motor speed and direction Control using keypad

In this project we interface a keypad with 8051 Microcontroller (Using assembly language), keypad button were program in a way to control direction of dc motor and also increase and decrease its speed.

5. Smart Energy Meter

In this project we had use ACS712 current measuring sensor and a digital voltmeter, we took constant readings of voltage and current and calculated average power in KWh, using unit price from electricity bill, we calculated the bill of the load, which refresh its value after 60 secs and displayed consumed power voltage level, current through load and the bill in Rs on a LCD.

BACHELOR DEGREE THESIS

Design of an Autonomous Air-Ground Robot

In this project, I am currently working in a team of BS undergraduate students to design an autonomous air-ground hybrid robot. It has the ability to run along the ground (like a small truck) and take to the air as needed (with Quadcopter-like capabilities - Vertical Take-Off and Landing (VTOL)). This project can be employed in various sectors such as building/bridge assessment, geological surveying, and security operations.

PEER-REVIEWED PUBLICATIONS

1. **Asad Asif**, A. Jafar, M. Ali, Awais shahid, "Design of an Autonomous Air-Ground Robot" "Is to be submitted soon"

COLLOQUIUM AND SEMINARS

1. **Asad Asif,** "INMIC IEEE conference 2016" at AIR University 2016.
2. **Asad Asif,** "Circuit Designing and PCB Designing using Protel 99 SE software" workshop at International Islamic University Islamabad 2014.

ACADEMIC ACHIEVEMENTS AND AWARDS

1. **Event Head (ElectroMapping):** Air Tech 2017 Air University, Islamabad.
2. **Robo-Maze at NaSCon 2017 (2nd position):** Fast University, Islamabad.
3. **Math's Magician at NaSCon 2017:** Fast University, Islamabad.
4. **Speed Wiring at NaSCon 2017:** Fast University, Islamabad.
5. **Organizer:** IEEE INMIC (international multi-topic conference 2016) — Air University, Islamabad.
6. **Event Deputy Head (Air Logic):** Air Tech 2016 Air University, Islamabad.
7. **Logic Chef at Youth Carnival 2016 (2nd position)**: institute of space and technology, Islamabad.
8. **Federal Board physics Model Competition 2013 (3rd position):** Rawalpindi college of commerce, Rawalpindi, Pakistan.