SHAHROZ IRSHAD

Electrical Power Engineer
(PEC Registered)

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OBJECTIVE:

I am willing to give total support to organization that I am in, with the experience and capability I have, in order to achieve organizations goal and create mutual benefits.

ACADEMICS:

M.Sc. Electrical Engineering: University of Engineering & Technology, Lahore, Pakistan	**CGPA 3.380/4.0**	**Continued**
B.Sc. Electrical Engineering: University of Engineering & Technology, Lahore, Pakistan	**CGPA 3.220/4.0**	**2013-2017**
F.Sc. Pre-Engineering: Govt. Post Graduate College, Layyah, Pakistan	**92.18%**	**2011-2013**
Matriculation*:* Zakariya Higher Secondary School, Layyah, Pakistan	**93.04%**	**2009-2011**

PROFESSIONAL EXPERIENCE:

Kot Addu Power Company, Kot Addu (KAPCO) **4 Weeks Summer Internship 2016**

- ✓ Learned about electricity generation from different types of fuels.
- ✓ Visited Battery Power Rooms & Switch Yards of 132 kV and 220 kV.
- ✓ Observed different electrical protection components.

FINAL YEAR PROJECT:

- ✓ **INTELLIGENT SOFT STARTER INVERTER FOR CONVENTIONAL AIR CONDITIONER | FINAL YEAR PROJECT 2016-2017**

  In this project, we have implemented the soft starting of induction motor (compressor) at reduced voltage and frequency. Voltage is controlled using Buck converter and the frequency is controlled using two full bridge inverters. The motor torque is controlled using Phase-Shift Algorithm implemented by microcontroller STM32F4.

  By the above-mentioned mechanism, we are able to:
  - ➢ Reduce the inrush current
  - ➢ Smooth starting of the motor
  - ➢ Huge Power Saving
  - ➢ Low Electricity Bill

SEMESTER PROJECTS:

- ✓ **SINGLE PHASE INVERTER | POWER ELECTRONICS|DECEMBER 2016**
  - Bipolar PWM
  - Unipolar PWM
- ✓ **THREE PHASE INVERTER | POWER ELECTRONICS |DECEMBER 2016**
  - SPWM Implementation
  - 180^{o} Conduction
  - 120^{o} Conduction
- ✓ **TWO WHEEL SELF BALANCING ROBOT | CONTROL SYSTEMS| MAY 2016**

  A two-wheeled vertical robot that balances itself by using feedback control applied on the IMU readings.
- ✓ **TACHOMETER | MICROPROCESSOR SYSTEMS | JANUARY 2016**

  Tachometer measures angular speed (rpms) of the running motor.
- ✓ **5W AUDIO AMPLIFIER | ANALOG AND DIGITAL ELECTRONICS | DECEMBER 2014**

  Design and Hardware implementation of an Audio Amplifier based on BJT IC's only.
- ✓ **ARITHMETIC LOGIC UNIT | DIGITAL LOGIC DESIGN | DECEMBER 2014**

  Design and Hardware implementation of 4-bit Arithmetic Logic Unit (ALU), able to perform 8 different arithmetic functions.
- ✓ **DUAL DC POWER SUPPLY | SEMICONDUCTOR DEVICES | APPRIL 2014**

  Design and Hardware implementation of 24 V Dual-Power DC Power Supply.

CO-CURRICULAR ACTIVITIES:

- ✓ Member of **Pakistan Student Welfare Society (PSWO)** at U.E.T Lahore
- ✓ Former **Vice Information Secretary** of Professional Layyan's Society (PLS)
- ✓ Remained **Class Representative** due to distinction during school
- ✓ Attended workshop on **PLC (Programmable Logic Controller)**

ACHIEVEMENTS:

- ✓ Stood **1st in Intermediate Examination** in Layyah district
- ✓ Stood **4th in Intermediate Examination** in D.G. Khan Board
- ✓ Received **PEEF Scholarship** in University on Merit
- ✓ Completed all the assigned projects with remarkable distinction, during engineering studies
- ✓ Received an award as **Vice Information Secretary** of Professional Layyan's Society (PLS)

COMPUTER PROFICIENCY:

- ✓ MS Office, MATLAB & Simulink
- ✓ Multisim, Proteus, Win Spice
- ✓ Power World Simulator (PWS), FEMM 4.2
- ✓ Programming in C, C++, Assembly Language
- ✓ STM32F4 Programming with MATLAB

INTERESTS:

- ✓ Novels
- ✓ Travelling
- ✓ Socializing with friends
- ✓ Movies

REFERNCES:

References will be furnished on demand.