

NOUMAN AHMED

Electrical Engineer (PEC No. ELECT/70436)

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PROFESSIONAL SYNOPSIS

- **B.E. (Electrical)** from National University of Sciences and Technology (NUST), Islamabad, Pakistan
- Working as **Energy Auditor** at SWITCH ASIA – IREET, IHT
- Worked as **Project Support Engineer** Trainee at IRIS INSTRUMENTS
- Worked as **Electrical Engineer** Intern at KOT ADDU POWER PLANT(KAPCO)
- Worked as **Electrical Engineer** Intern at NATIONAL TRANSMISSION & DESPATCH COMPANY (NTDC)
- **PEC** and **Washington Accord** Degree Accreditation Certification
- **Intermediate** from Punjab College and **Matriculation** from The City School, Kot Addu Campuses

PROFESSIONAL EXPERIENCE as ELECTRICAL ENGINEER

Summary: My undergraduate course work, training experience and projects have helped me to set up a strong foundation to grow as Engineer. I have experience and demonstrated skills in maintenance, operation, interpreting, troubleshooting, monitoring, reverse engineering, reviewing and working of machinery installed at industries, power generation plants and Pakistan Forces including grid station, control room, water treatment plants, fuel treatment plants, lubricating systems, cooling system, relay system and battery room.

Energy Auditor at SWITCH Asia – IREET, IHT includes learning in the following fields:

PRESENT

- Verify and control usage of SUGARS (software) to achieve optimum efficiency of industry's resources, minimum down-time, maximum availability and quality in the data and reports
- Planning of routine maintenance activities and major overhauls at the Sugar Cane Mills, enabling the business to meet availability, reliability, efficiency, production, generation and cost targets.
- Controlling the maintenance requirements as well as generating the necessary maintenance reporting and participating in the root cause analysis of all events in the plant.
- Provide support to project managers for preparation and follow up of planning for project in order to ensure high quality standards are being applied.
- Performance Analysis and Bench marking
- Energy & Resource Conservation and Productivity Improvement Initiatives
- Energy Management System Design & Implementation

Project Support Engineer at IRIS INSTRUMENTS includes learning in the following fields:

SEPT'18 - MAR'19

- Study, research and testing of components and electronics related peripherals
- Project Management and Planning for implementation for projects.
- Signal Processing, designing and development of printed circuit boards
- Patching of self designed circuits
- Reverse engineering and ordering required components
- Performing site survey and study of existing systems and instruments
- Calibration of different type of sensor and indicators using single, multiple point calibration.
- Process monitoring and control solutions in accordance with the engineering standards.
- Troubleshooting of day to day technical problems
- Developing of engineering, one-line P&I diagrams and Hydraulic Diagrams

- Hardware design, development and fabrication of custom solutions to be used in automation
- Ensuring safety procedures during commissioning of new systems
- Technical Support to the customer & Training of Personnel involving on site location
- Working with the clients from Pakistan Armed Forces and Industrial Sector
- Risk assessment of already installed systems and Preparation of Technical Documentation

Internee Electrical Engineer at NTDC includes learning in the following fields:

JULY – AUG' 17

- Relay Systems of all protections at Grid Station
- Detailed study and commissioning of transformers
- Familiarization of components at grid station
- Testing and maintenance of operating systems
- Proceedings required in control room in case of faults
- Familiarization with Gas Insulated Grid Station (University Grid, Barakhau)
- Maintenance and operation of 132KV one & half scheme switchgear
- Familiarization with SCADA and Manually operated system
- Seminars about team management and organizational structure of NTDC

Internee Electrical Engineer at KAPCO includes experience in the following areas:

AUG – SEP' 16

- Observing how the machinery installed at power plant and grid functioned
- Co-relate theoretical knowledge gained through textbooks on the field
- Find faulty conditions of the operating systems
- Learning required tests to ensure the proper functioning of systems
- Tracing and Understanding one-line P&I and Electrical MCC diagrams
- Overall process theory of Combine Cycle Power Plant technology
- Start-up and Shutdown sequence of Gas Turbine and Steam Turbine
- Observing the emergency condition in case of machine breakdown or Blackout
- Generator, Transformer and Bus bar Electrical Protection
- Awareness of HSE standards implemented by KAPCO/International Power Safety rules

ACADEMIC TECHNICAL PROJECTS

- **Dehydration Identification & Vitality Evaluation (DIVE) - FYP**
(A noninvasive wearable gadget to observe parameters such as hydration, heart rate, calories, step-count and fatigue level through sweat, PPG and accelerometer sensors involving domain of DSP and power electronics)
- **Digital Security lock system - Semester Project**
(A password-based security system using 8051 micro-controllers in which user saves a desired password initially and controls the lock based on entered password with keypad)
- **Automatic Irrigation System - Semester Project**
(A controlled irrigation system which operates the water motor, based on moisture level of sand and humidity level of atmosphere to irrigate the land without intervention of humans in order to improve the growth of plants and stop use of water extravagantly)
- **Electric Bill calculator - Semester Project**
(A real time display of electricity bill which records operating time of electricity utensils and then displays the bill)
- **SOFTWARE PROJECTS**
File handling, Terabyte sort challenge and Face Recognition and Image processing - Semester Projects

TRAININGS & VOLUNTEER EXPERIENCE

- **One day Training** visit at 220/132/11kV Grid Station of NUST H-12
- **One day Training** visit at 220/132/11kV University (Gas Insulated) Grid Station Barakhau, Islamabad
- **Arduino Workshop** Certification: **IEEE-SEECs**
- **SCADA Seminar** attendee: Control Systems Lab-SEECs
- **Markhor 2016:** Wilderness Based Youth Leadership Conference Youth Impact
- **Social Media and Publications Executive** at NUST MEDIA CLUB
- **Executive Member** at HUNEHAR (ISLAMABAD NGO) Link: bit.ly/2d2GRfC
- **Senior Executive Team Registration** at YOUTH IMPACT (NGO) Link: bit.ly/2aAyOSR
- **Social Media Marketing Team Member** at STARTUP ISLAMABAD
- **Campus Ambassador** from NUST, H-12 for GIMUN'16
- **VP Marketing** at TRIUNE FEATS Link: bit.ly/2cr2VAP
- **Campus Ambassador** at JUMP STARTUP PAKISTAN (STARTUP ISLAMABAD)
- **Organizing Committee Member** at SEECs OPEN HOUSE, 2016
- **Organizing Committee Member** at YOUTH IMPACT, MARKHOR'16
- **Brand Ambassador** at KARACHI YOUTH MODEL UNITED NATIONS
- **Communication Skills** Training at NUST Community Service

COMPUTER SKILLS

- Excellent in using OrCAD Capture, PSpice, LabVIEW, Simulink, FXTRN, Eagle, RSLogix Micro, Proteus
- Other main software used are Advance Design System, Matlab, Arduino, Visual Studio
- Personally, used Microsoft Word, Excel, PowerPoint, Photoshop, Light Room, Premiere Pro, AutoCAD
- Operating Systems: Microsoft Windows all versions, Mac,

LANGUAGE & CAPABILITIES

- Can Read, Write, Speak & Understand English, Urdu, Punjabi, Sariki at advanced and Arabic at basic level
- A good experience in managing teams and committed to safety and quality
- Strong interpersonal skills, business minded, motivated, reliable, and flexible
- Strong communication skills with good experience of presentation to management and negotiation skills
- Passport ☒ Driving License ☒ PEC Registration ☒ Washington Accord Accreditation ☒

INTERESTS & EXTRA ACTIVITIES

- Football, Volleyball, Running, Cooking, Hiking, Travelling, Riding
- Studying current affairs and Tech-Magazines
- Philanthropist and Activist
- Mentorship: Peer to peer mentorship software, electrical engineering, computer science and mass communication students
- **Freelancing:** freelancer.pk/u/noumanahmedrao.html
- **Social Media Marketing** Tools: [!\[\]\(67ff022fd78f943b679992c2874bbfd1_img.jpg\)](#) [!\[\]\(042ea11c58a77088d3dd7150909adec0_img.jpg\)](#) [!\[\]\(5890ff4c38007932c846fa9d39ba1fe6_img.jpg\)](#) [!\[\]\(0951d374ca92713a262635cd1d2251b2_img.jpg\)](#) /noumanahmedrao
Skills: Brand identity, Project Hashtag Management
- **Blogging Websites:** theyouthimpact.org/markhor
alifyay.blogspot.com.html
papercrush.pk/author/nouman