NOUMAN ALI
ELECTRICAL ENGINEER

Education

PhD ELECTRICAL ENGINEERING | ITU, Lahore
Sep, 2021 – contd. (Course Work Complete)

MS ELECTRICAL ENGINEERING | SEECS, NUST
2015 – 2017 | CGPA: 3.55/4.00

BS ELECTRICAL ENGINEERING | CUI, Lahore Campus
2011 – 2015 | CGPA: 3.56/4.00 *(Silver Medalist)*

Experience

RESEARCH OFFICER | National Institute of Electronics, ISB
12/2017 – 09/2021 (3 Years, 9 Months)
- Supervision of project life-cycle from planning, design and procurement to implementation.
- Designing and analyzing the schematics and PCBs of the projects.
- Programming the embedded micro-controllers related to the project.

RESEARCH ASSISTANT | SEECS, NUST
11/2016 – 10/2017 (11 Months)
- R&D of **Wi-Fi-based Smart Load Enabler** device for making conventional sockets smart
- Successful implementation of **Client-Server Communication** between multiple SLE devices
- **Human Presence-Based Automation** of WISNET Lab at SEECS, NUST

Research Publications

- Muhammad Bilal Satti, Nouman Ali, Mian Mohammad Arsalan Asif, Abdul Hafeez Abid, and Ammar Hasan. "**A Low-Cost Smart Load Enabler Device**." In *2018 15th International Conference on Smart Cities: Improving Quality of Life Using ICT & IoT (HONET-ICT)*, pp. 61-64. IEEE, 2018.
- Rizwan Amir, Nouman Ali, and Ammar Hasan. "**An efficient branch and bound algorithm for direct model predictive control of boost converter**." *IEICE Electronics Express* (2019): 16-20180445.

Projects

- IoT Based Smart Energy Meter
- 6-Channel Smart Socked Based on ESP8266
- Automatic Line Changeover based on Unit Consumption
- Automatic Solar Switch for UPS
- PIC18F4550 Development Board
- RFID and Wi-Fi Door Lock based on ESP8266
- Automatic Sliding-Door Control System
- Power Monitoring System

Design Platforms & Software

- mikroC PRO for PIC
- Visual Studio Code
- Node Red
- Android Studio
- PlatformIO
- MATLAB
- Arduino IDE
- STM32Cube IDE
- PROTEUS
- Eagle CAD
- C/C++
- Raspberry Pi
- Python