



Muhammad Usama

Electrical Engineer

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A detail-oriented electrical engineer with experience in designing and implementing electrical systems for commercial and residential projects. With a strong background in electrical theory and practical application skilled at troubleshooting and finding innovative solutions to complex problems. Additionally, excellent communication and teamwork skills allow him to collaborate effectively with clients and colleagues to ensure successful project outcomes.

EDUCATION

BS Electrical Engineering Namal University Mianwali

09/2019 - Present

2.98/04

Courses

- | | |
|---------------------------|-----------------------------|
| - Wireless Communications | - Internet Of Things |
| - Database Engineering | - Digital Image Processing |
| - Power Electronics | - Digital Signal Processing |

UNDERGRADUATE PROJECTS

Cellular Traffic Prediction Using Federated Learning

- Project focuses on using Federated Learning for Cellular Traffic Prediction, which can improve the accuracy of predictions while preserving the privacy of user data.
- This involves comparing the performance of Federated Learning algorithms with traditional methods such as ARIMA, GARCH, Deep Neural Networks, and LSTM. and developing skills in machine learning, research, data analysis, and programming.

Efficient Solar Charging System with MOSFET Switching

- Designed a low-cost electrical charger for the solar cell that could reduce the voltage from 12 to 3 volts using the buck converter, used 555 timer IC for switching of MOSFET, built prototype < \$5

MATLAB-based Speech Recognition Model

- Developed the speech recognition model using the MATLAB where correlation algorithms were implemented to train code for a given set of specific speech-based audio files, code was tested for security applications

WORK EXPERIENCE

Electrical Intern

Crystalline Chemicals Pvt. Ltd. , Pakistan

08/2022 - 09/2022

Sargodha, Pakistan

Achievements/Tasks

- Gained hands-on experience and education on complex high-power electrical systems, including transformers, switchgears, and generators, which are critical components of industrial power distribution systems.
- Prepared comprehensive reports, and shared learning outcomes effectively with university fellows.
- Conducted research and hands-on experiments on power generation using biogas

SKILLS



ACHIEVEMENTS

Full Fee Merit-based scholarship holder in B.S Electrical Engineering (2019)

Full Fee Merit Based Scholarship holder at College Level (2017)

Director Marketing at Namal Media Club (Nov 2022-Present)

Only Media Society of Namal

ORGANIZATIONS

Crystalline Chemicals Pvt. Ltd. , Pakistan
(08/2022 - 09/2022)

Electrical Intern

Namal Media Club (09/2022 - Present)

Director Marketing

CERTIFICATES

Python Workshop (05/2022 - 05/2022)

Arduino Workshop (02/2022 - 02/2022)

INTERESTS

