

Muhammad Taha

Electrical Engineer

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PROFILE

Ambitious Electrical Engineering student combining sharp intellect with technical proficiency in AutoCAD, C++ programming, and circuit simulation. Demonstrates quick adaptability, problem-solving aptitude, and a passion for innovation. Eager to apply classroom knowledge to real-world challenges through an internship, contributing fresh perspectives while rapidly developing industry-specific expertise. Committed to leveraging strong academic foundation and enthusiasm for complex tasks to make meaningful contributions.

EDUCATION

09/2023 – present Karachi, Pakistan	B.E Electrical Engineering <i>NED University of Engineering and Technology</i> Course Work: Introduction to Electrical Engineering Circuit Analysis Digital Logic Design Programming for Engineers Calculus I and II Linear Algebra Data Structure and Algorithm Physics for Engineers Engineering Mathematics Introduction to Electronics Computer-Aided Design for Electrical Engineering
08/2021 – 08/2023 Karachi, Pakistan	Intermediate - Pre-Engineering <i>Meritorious Science College</i> Grade : B
08/2019 – 05/2021 Karachi, Pakistan	Matriculation - Computer Science <i>St. Paul's English High School</i> Grade: A

PROJECTS

Mobile Charger Circuit:

This project designs a compact mobile charger circuit that converts AC to DC, ensuring stable voltage output.

Mobile Detector Circuit:

Engineered a mobile detector circuit capable of identifying the presence of mobile phone signals within a specified range.

DC Power Supply:

Developed a DC power supply unit, delivering a stable and adjustable output voltage for various electronic devices.

Extension:

Designed and built an extension project to expand the functionality and usability of existing electrical systems.

Smoke & Fire Detector:

Developed a sensor-based smoke and fire detection system using an MQ-2 gas sensor, flame sensor, buzzer, and Arduino Uno to provide real-time alerts and enhance safety measures.

Stop Watch:

Built a digital stopwatch using CD4026 ICs, 555 Timer, and 7-segment displays for time measurement applications in basic digital systems.

EXPERIENCE

03/2025 – 04/2025 Karachi, Pakistan	NAT SOLAR ENERGY <i>Solar System Installation Intern</i> During my one-month internship at NAT Solar Energy, I assisted in site surveying, installation, and wiring of solar PV systems. I also conducted basic troubleshooting and maintenance, gained insights into system design and safety regulations, and attended client meetings to understand energy-saving solutions.
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SKILLS

HTML, CSS, JS

Proficient in web development, utilizing HTML for structuring web pages, CSS for styling and layout, and JavaScript for dynamic interactivity and functionality.

Electrical AutoCAD

Proficient in creating precise technical drawings and schematics for complex electrical systems and components.

C++

Strong coding skills with a focus on efficient, objectoriented programming for various applications.

MATLAB

Proficient in MATLAB for data analysis, simulations, and algorithm development.

PVSYST

Familiar with PVsyst, a solar simulation software used for designing, analyzing, and optimizing PV systems, including energy yield estimation and performance evaluation.

Modelsim

Proficient in using ModelSim for simulating and debugging digital circuits written in Verilog, enabling verification of logic behavior through waveform analysis.

MultiSim

Experienced in circuit prototyping and simulation for effective design analysis and optimization.

Python

Skilled in Python Programming, enabling efficient automation and innovative problem solving.

Microsoft Office

Proficient in creating professional documents, complex spreadsheets, and engaging presentations using Word, Excel, and PowerPoint.

HELIOSCOPE

Familiar with HelioScope for basic solar PV system design and simulation, including preliminary shading analysis and energy estimation.

SKETCHUP

Beginner-level experience in 3D modeling and visualization using SketchUp for basic electrical and solar system designs.

QUARTUS

Familiar with Quartus, an FPGA design software used for writing, compiling, and simulating Verilog code, and implementing digital systems on Intel FPGAs.

ORGANISATION

02/2025

Karachi, Pakistan

Anjuman Hayat-ul-Islam

Volunteer

Earned a Community Service Certificate for volunteering at an orphanage, spending three days engaging with children through story telling, creative play, and interactive learning activities. Fostered a joyful and nurturing environment, promoting social and emotional development while demonstrating patience, empathy, & teamwork.

LANGUAGES

English



Urdu



