Meshal Saud Meshari Alotaibi

Electrical Engineer

MeshalSaudAlotaibi@pm.me 966502018748 Al Dawadimi - Saudi Arabia 2002-12-07

Saudi https://communaction.work/home/

Profile

Recent Electrical Engineering graduate specializing in Communication Engineering with extensive hands-on experience in smart systems, embedded devices, and interdisciplinary innovation. Eager to contribute engineering knowledge, problem-solving abilities, and passion for technology to a forward-thinking organization.

Experience

Intern, *Saudi Electricity Company (SEC)* Ad-Dawadimi

- Maintained, installed, and troubleshot smart MUs and MRMUs in both city and remote areas
- Gained hands-on experience with UEs, sectorizers smart devices, and grid communication hardware
- Independently installed the first MAMU in Ad-Dawadimi under supervision
- Learned practical problem-solving in route setup, communication errors, and field deployment

Education

Bachelor, *Shaqra University*

- Graduated with specialization in Communication Engineering

Skills

- Arduino/ESP32 Expert
- FPGA Beginner
- PLC Beginner
- HTML/CSS Beginner
- 3D modeling/Printing Advanced
- Smart Grid Technology
- Digital Communication Systems
- Electrical Installation
- Circuit Analysis
- Time Management
- Raspberry Pi Beginner
- SCADA Beginner
- Python Intermediate
- Networking (Routers) Intermediate
- Logic Gates circuit design Advanced
- Maintenance & Troubleshooting
- Remote Monitoring Units (RMU)
- Sectorizers Smart Devices
- Problem Solving
- Critical Thinking

Languages

Arabic
Native

English
Advanced

Interests

- Self learning
- D.I.Y Projects
- Archery
- Shooting
- Swimming

Achievements

EcoSat-net [Graduation Project]
- Hybrid MRV System combining satellite and ground sensor networks
- Designed, built, and deployed a system that collects, forecasts, and displays environmental data
- Full-stack implementation sensor interfacing, data transmission backend forecasting, and web interface
- Semi-finalist at Smart-CDR competition

Smart Home System
- Built and programmed node functions in smart home archetype with various sensors and automation features

Digital Logic Clock (No Microcontroller)
- Designed and developed a working digital clock using only logic gates and timers
- No code used - purely hardware design

Wireless Charging Station for EVs
- Demonstrated wireless power transfer using a toy car
- Assembled the demo unit

Auto Solar Panel Cleaner
- Participated in building a solar panel cleaner that activates based on dust density detection
- Contributes to circuit wiring and part of the code

Vision System for "Sarah" Robot Car
- Built and integrated an AI camera module for object detection and tracking
- Worked as part of a multidisciplinary university team

Robot Hand Controlled by Sensor Glove
- Designed and assembled a robotic hand that mirrors hand movements via glove-mounted sensors
- Developed the control logic and performed 3D modeling and printing for the design

Links

WordPress

LinkedIn