

CURRICULUM VITAE

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Research Areas: Multilevel Inverter, Multi-carrier Modulation Techniques, Inverter based Selective Harmonic Elimination, Stepper Motors for Robotic Systems, Electrical Measurement and Monitoring System Based on Arduino, PLC as Industrial Controller, Modeling Wind Turbine Energy System, Modeling and Simulation of Solar Photovoltaic Array, Solar Tracking systems.

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- **Theses Supervision:**

- “Design and Implementation of a Smart Online Monitoring System for Photovoltaic Panels”, College of Engineering, Tikrit University, 2022.
- “Design and Implementation of a Solar Panel Data Monitoring System based on PLC S7-1200”, Technical Engineering College/Mosul, Northern Technical University, 2023.
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