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Electric Vehicle Wireless Charging Station Using Arduino Uno

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Abstract: *A fast developing technology used in many different fields, wireless power transmission (WPT) allows power to be transferred from a source to an electrical load without the need for physical connections. WPT is especially useful in situations when traditional wiring is neither feasible or feasible. The mutual inductance principle underlies this technology. One potential use case is in the automotive industry, specifically in electric vehicles (EVs). The study and creation of wireless charging systems specifically designed for EVs that use Tesla coils for power transfer are the main topics of this research paper. Establishing effective charging systems with a DC power supply, transmission coil, reception coil, and battery acting as the electric load is the main goal.*

Keywords: Electric Vehicle, Wireless Charging, WPT, Wireless Power Transmission

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