

The “IoT-Based Two-Wheeler Charging” project introduces an innovative solution to address the challenges in electric vehicle charging infrastructure. With the surge in demand for ecofriendly transportation, electric two-wheelers have gained popularity, yet accessible and userfriendly charging facilities remain limited. This project seeks to revolutionize the charging experience by harnessing the power of the Internet of Things (IOT). By combining IOT technology with electric vehicle charging, this initiative aims to provide seamless and convenient charging solutions.

The project encompasses both hardware and software development. A compact and weather resistant charging station will be designed, equipped with IOT modules for remote monitoring and control. Users will benefit from a user-friendly mobile application, offering features like real-time charging updates, energy consumption tracking, and secure cashless transactions. Additionally, safety mechanisms will be integrated to prevent overcharging and ensure secure transactions, bolstering user confidence.

The IOT integration will establish secure connections between the charging station and a cloud server, enabling remote access through the mobile app. Rigorous testing and validation will ensure the system’s reliability and performance under various conditions. The project’s outcome aims to bridge the gap in electric vehicle charging infrastructure, making electric two-wheelers a more viable and attractive option for eco-conscious commuters. By offering a robust, IOTdriven charging solution, this project contributes to a cleaner and sustainable transportation ecosystem.