Product Design: Implementation of IoT System for Electronic Three-Wheeler

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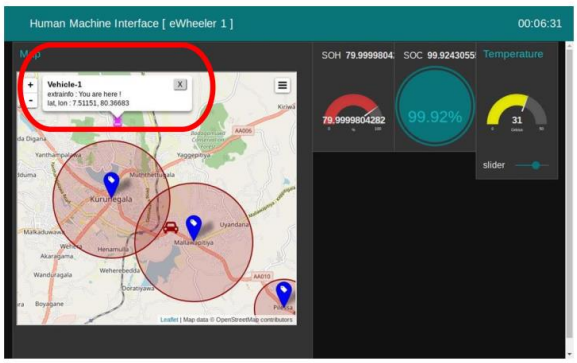
Short introduction about the work

This project involves the implementation of an IoT system for an electrical three-wheeler that is capable of communicating with the battery swapping stations. Additionally, the IoT system can give the user information about battery availability at the swapping station, battery state of charge(SoC), and State of Health(SoH) details to the user with the help of a heads-up display that is installed in the three-wheeler.



Video Link

Key results

1) HUD unit that is capable of showing SoC and SoH of the batteries and battery swapping stations
2) IoT linked system to reserve batteries from battery swapping stations
3) Extended Kalman filter-based SoC and SoH calculation program

Beneficiaries of the research (optional)

This research benefits potential companies and investors looking into research and development in light electric vehicles. Additionally, this is beneficial for communication providers that are interested in setting up enterprise communication networks related to IoT systems

Research team

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