Electric vehicle data acquisition system - DTU Orbit (17/03/2019)

**Electric vehicle data acquisition system**

A data acquisition system for electric vehicles is presented. The system connects to the On-board Diagnostic port of newer vehicles, and utilizes the in-vehicle sensor network, as well as auxiliary sensors, to gather data. Data is transmitted continuously to a central database for academic and industrial applications, e.g. research in electric vehicle driving patterns, vehicle substitutability analysis and fleet management. The platform is based on a embedded computer running Linux, and features a high level of modularity and flexibility. The system operates independently of the make of the car, by using the On-board Diagnostic port to identify car model and adapt its software accordingly. By utilizing on-board Global Navigation Satellite System, General Packet Radio Service, accelerometer, gyroscope and magnetometer, the system not only provides valuable data for research in the field of electric vehicles, but also allows for experiments and investigation of other related topics.

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