

EE6509 Assignment

Vehicle-to-grid

October 9, 2024

INSTRUCTIONS

- This is an group-based assignment.
- Please submit the assignment report and similarity check report via email to Prof. Hung Nguyen at hunghd@ntu.edu.sg by 30 November 2024 at 11:59 PM.
- Email subject format: EE6509 Assignment 2-Your group's (short) first names.
- Please also provide your names and matriculation numbers of all team members in the report.

PROBLEM DESCRIPTION More energy storage systems, such as batteries, supercapacitors, hydrogen, and hybrid systems, will be deployed in various applications in the future such as those in electric vehicles, and building & grid utilization. We need timely solutions for emerging scientific and technical challenges in energy storage transportation systems and smart grids. The objectives of this assignment are the followings.

- Study vehicle-to-grid (V2G) infrastructure and interactions with energy storage systems.
- Existing V2G platforms and standards.
- Develop an application of AI and machine learning to energy storage for transportation and power grids.