

IEEE VTS Motor Vehicles Challenge 2024

Energy and Powertrain Losses Management of an e-Racing Vehicle

Challenge

The studied racing vehicle is based on the one developed in the University of Nottingham. This Challenge aims to extend the powertrain efficiency and racing distance by solving a coupling issue of energy consumption and power losses.



The participants need to:

- Propose a suitable Energy Management Strategy based on the provided storage system to reduce energy consumption.
- Propose a suitable Powertrain losses Management Strategy to reduce the losses of power electronics converters, inverter and the e-machine.

Prizes

- First prize: Up to a limit of 3500 US\$.
- Second prize: Up to a limit of 1500 US\$.

This competition is open to everyone (students, academics, and industry). However, only VTS members are eligible to receive the grant. So join us now!

Committees

Dr Ke Li, University of Nottingham, UK

Dr Thanh Vo-Duy, Hanoi University of Technology and Science, Vietnam

Dr Alessandro Serpi, University of Cagliari, Italy

Dr Mario Porru, University of Cagliari, Italy

Important dates

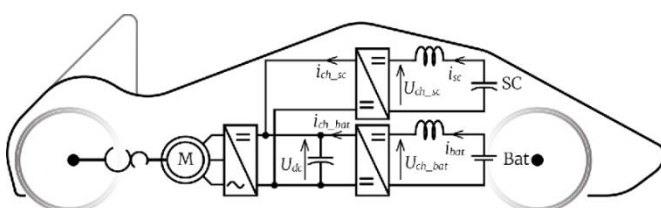
Registration: December 22, 2023

Submission: February 23, 2024

Results: March 22, 2024

Registration link: <https://forms.office.com/e/sHsHSTLG9y>

Model download: <http://www.uqtr.ca/VTSMotorVehiclesChallenge>



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