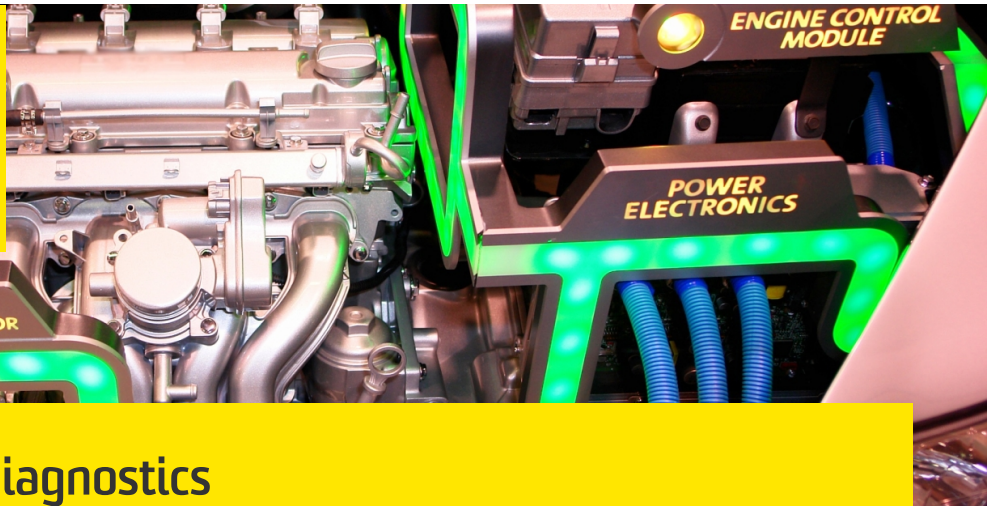




UNSW
SYDNEY



Power Electronics Diagnostics

More than two decades of expertise in the research and development of inverter and associated power semiconductors. Able to model both healthy and faulted conditions, to enable the development of proper control strategies that maintain the operation of electric machines when faults occur.

Competitive advantage

Substantial expertise in:

- Analysis of the failure mechanism in inverters for three- and multi-phase machines
- Optimisation of inverter design to minimise the potential for failure
- Developing control strategies for high-reliability inverter-driven machines and enabling them to operate post-failure

Impact

- Improved the performance and reliability of inverters and inverter-based machines through experience-based design.

Capabilities and facilities

- Comprehensive experimental-rig for testing and analysing inverters for electric machines
- dSPACE 1006 rapid modular systems for rapid-control prototyping
- dSPACE Micro LabBox

Our partners

- Motorica
- Hummingbird Electronics

More Information

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