Job Title: Research Fellow

Project title: “Simulation and Modelling of Marine Electrical Machines for the Development of Advanced Health Monitoring Methods”
(Funded by: Singapore Maritime Institute under ‘SMI Simulation & Modelling R&D Programme’ and Rolls-Royce Pte Ltd Singapore)

Job Description
Academic and applied research involving design, development, modeling, simulation and experimental testing of condition monitoring of electrical machines; power electronic converters; high-performance electrical machine drives. Perform literature review, state-of-the-art analysis, modelling and simulation, experimental validation, writing reports and contribute to scientific papers/presentations.

Requirements
- We seek motivated postdoctoral candidate with proven excellent academic and research record, who is ready to thrive in a dynamic, multicultural and multidisciplinary team.
- Relevant experience in design, development, realization and investigation of condition monitoring of electrical equipment, electrical machines, drives, power electronics and control algorithms for converters.
- Strong simulation and modelling experience in using tools such as PSCAD, EMTP, MATLAB, PSim, Plecs etc. and control platforms like dSpace, Microcontroller.
- Prior experience in mathematical modelling of electrical machines, ability to carry out statistical analysis and exposure to artificial intelligence (AI) techniques like Fuzzy, ANN, etc., will be an advantage.
- Fluent verbal and written communication skills in English.
- Appointment at higher grade requires supervision of staff/students and ability to propose research ideas.

Remuneration & Benefits
Gross monthly salary will be commensurate with qualifications and experience. Leave and medical benefits will be provided.

Term of Appointment
The appointment can commence immediately and will be initially for one year with the possibility for extension of up to additional two years.

Contact Person
Interested candidates may send their detailed curriculum vitae with a covering letter explaining their current interests, background relevant to this project and NUS Personal Data Consent for Job Applicants to A/Prof. Sanjib Kumar Panda (eleskp@nus.edu.sg).

Application Deadline
Open till the position is filled.