Job Title: Research Engineer

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 candidate with proven excellent academic and research record, who is ready to thrive in a dynamic, multicultural and multidisciplinary team.

- Masters in Electrical Engineering with 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 and background relevant to this project and NUS Personal Data Consent for Job Applicants to A/Prof. Sanjib Kumar Panda (eleeskp@nus.edu.sg).

Application Deadline:
Open till the position is filled.