Research Engineer/Research Associate/Research Fellow

Company Name
National University of Singapore, Dept of Electrical & Computer Engineering

Job Description
To work on the research and development of for a FSTD-supported project on advanced spacecraft control design using Control Momentum Gyrosopes (CMG). In this project, a position is available to work on the hardware-in-the-loop simulation and laboratory set-up of the CMG-based 3 axis attitude control. The project also collaborates with ST Engineering (Satcom) to explore in-orbit test and evaluation opportunity of such concept.

Responsibilities include:
  a) Formulate a laboratory set-up to examine and evaluate CMG concept.
  b) Develop hardware-in-the-loop simulation capability of CMG based spacecraft attitude control. This development will involve consideration of hardware from collaborator (ST).
  c) Development of the CMG control software including safe-hold or redundancy handling concept.
  d) Formulate a CMG-based demonstration satellite mission in collaboration with ST so as to explore in-orbit opportunities to conduct tests on such concept.

Requirements
Experience/skill requirements:
- Strong background in
  o Electronic Hardware Design, Embedded Systems, Micro-processor based system
- Working knowledge and/or experience in one or more areas of:
  o Matlab and Simulink
  o C/C++ programming

Qualification requirements:
Possess at least a B.Eng./M.Eng./Ph.D. Degree in Electrical/Electronic Engineering or Electrical and Computer Engineering from a reputable university, with specialization or demonstrated capabilities in the area of electronics hardware and micro-processor based system development.

Remuneration & Benefits
The remuneration package will be based on the applicant’s educational qualification, background, and relevant work experience.

Term of Appointment
The appointment will be initially for 2.5 year, extendable for another 1 year subject to work performance

Contact Person
Interested candidates shall send their detailed curriculum vitae and the NUS Personal Data Consent for Job Applicants to Professor Goh Cher Hiang (elegch@nus.edu.sg)

Application Deadline
11 Nov 2014