Research Engineer II (Satellite Mission and System Design)
Nanyang Technological University

Job Title	Research Engineer II (Satellite Mission and System Design)
Department	School of Electrical and Electronic Engineering
Institution	Nanyang Technological University Singapore, , Singapore
Date Posted	May 31, 2024
Application Deadline	Open until filled
Position Start Date	Available Immediately
Job Categories	Professional Staff
Academic Field(s)	Aerospace/Aeronautical/Astronautics
Job Website	https://ntu.wd3.myworkdayjobs.com/en-US/Careers/job/Research-Engineer-II--Satellite-Mission-and-System-Design-_R00017368
Apply Online Here	https://ntu.wd3.myworkdayjobs.com/en-US/Careers/job/Research-Engineer-II--Satellite-Mission-and-System-Design-_R00017368
Apply By Email	

Job Description

The School of Electrical and Electronic Engineering is looking for a responsible Research Engineer II in Satellite Mission and System Design. The Research Engineer II will support the research for the project titled "Equatorial Sentinels for Environment".

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Key Responsibilities:

- Perform Phase 0 / Phase A studies that are necessary to identify the best concepts and to perform preliminary design of both space and ground segments.
- Write proposals to get the funding to mature the concepts until a full realisation Phase A/B/C/D can be engaged.
- Perform end-user requirements analysis (in collaboration w end-users) and identify data gaps by analysing data provided by existing and planned satellites.
- Identify and compare the most relevant sensors to fulfil all or part of the end-user requirements.
- Perform global trade-offs between GEO/Big LEO satellites and (very) small satellites.
- Analyse and define how (very) small satellites could leverage upon Big LEO to provide the best scientific value.
- Perform orbit and mission analysis at satellite and multi-satellite levels (using relevant simulation software).
- Define and generate mission scripts/algorithm to perform mission planning.
- Define space and ground segment in a consistent way, leveraging on best technologies ready to fly.
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Identify and characterize key bottlenecks at sensors, bus and system levels and the technological solutions to unblock them.

- Work with team members to ensure smooth integration of concepts into mission/system design and sub-systems design.
- Document all process and implementation.
- Manage tasks according to project schedule.
- Support the Centre and project operation, such as satellite mission operation, satellite testing and student activities.

Job Requirements:

- Master Degree in Aerospace Engineering or related field from a reputable university.
- Experience in industry would be appreciated.
- International experience would be appreciated.
- Experience in satellite and/or space systems Phase 0/A and subsequent realization phases (including writing proposals).
- Experience in managing end-user requirements.
- Experience in satellite mission design and simulation software e.g. FreeFlyer, GMAT, STK or

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equivalent.

- Experience in satellite system design & development.
- Overall understanding of satellite development life cycle and of satellite development/launch/operation cycle.
- Ability to perform debugging, system integration and testing.
- Able to multi-task and work in a dynamic environment.
- Good self-discipline and team player.
- Fluent verbal and written communications in English.

We regret that only shortlisted candidates will be notified.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

Singapore