Senior Research Engineer I (Satellite System Hardware)
Nanyang Technological University

Job Title	Senior Research Engineer I (Satellite System Hardware)
Department	School of Electrical and Electronic Engineering
Institution	Nanyang Technological University
	Singapore, , Singapore
Date Posted	Mar. 18, 2024
Application Deadline	Open until filled
Position Start Date	Available Immediately
Job Categories	Professional Staff
Academic Field(s)	Electrical and/or Electronics
Job Website	https://ntu.wd3.myworkdayjobs.com/en-US/Careers/details/Senior-Research-Engineer-I--Satellite-System-Hardware-_R00016505?q=satellite%20system%20hardware
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Apply By Email	

Job Description

The School of EEE invites applications for the position of Senior Research Engineer I (Satellite System Hardware).

The Research Engineer will work on a project to conduct the research on development of energy harvesting systems used in low power smart sensors for monitoring of buildings and bridges, as well as

the integration of energy harvesters, power management circuit and monitoring sensors.

Key Responsibilities:

- Design and develop MCU/MPU/SOC platform.
- Analyze system requirements and generate modular specifications.
- Identify and qualify components for spacecraft operation.
- Build, test and modify prototypes.
- Circuit validation and system operational validation.
- Test and characterize circuits.
- Code and debug in embedded C.
- FPGA programming.
- Guide/design printed circuits to comply to EMC/EMI requirements.
- Work with team members to ensure smooth integration of various subsystems.
- 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.
- Work on a project to conduct the research on development of energy harvesting systems used in low power smart sensors for monitoring of buildings and bridges.
- Work on integration of energy harvesters, power management circuit and monitoring sensors.

Job Requirements:

- Bachelor's degree and above in Electronic Engineering or related field from a reputable university.
- Diploma with good industry experience may also be considered.
- Experience in MCU/MPU/SOC embedded system platform design and programming.
- Good understanding and ability in analog and digital circuit design
- Proficient and good skill in pcb artwork such as Altium or Orcad.
- Knowledge of various embedded hardware and application systems.
- Experience in generation of design specification documentation, schematic capture, and circuit analysis and simulation.
- Experience with debugging tools such as bus and spectrum analyzer.
- Experience in CAN, SPI, I2C bus protocols.
- Able to multi-task and work in a dynamic environment.
- Fluent verbal and written communications in English.
- Complete full product life cycle knowledge is preferred.

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- Experiences in FPGA, Analog or RF design is preferred.

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