Research Fellow/Engineer (Robotization and Automation) - NTQ1
Singapore Institute of Technology

Job Title	Research Fellow/Engineer (Robotization and Automation) - NTQ1
Department	Engineering
Institution	Singapore Institute of Technology Singapore, , Singapore
Date Posted	Aug. 15, 2023
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Research Scientist/Associate
Academic Field(s)	Civil Engineering
Job Website	https://careers.singaporetech.edu.sg/cw/en/job/498482/research-fellowengineer-robotization-and-automation-ntq1
Apply By Email	
Job Description	

Research Fellow/Engineer (Robotization and Automation) - NTQ1

Job no: 498482
Department: Engineering
Contract type: Contract
Apply now

Research Fellow/Engineer (Robotization and Automation) - NTQ1
Singapore Institute of Technology

As a University of Applied Learning, SIT works closely with industry in our research pursuits. Our research staff will have the opportunity to be equipped with applied research skill sets that are relevant to industry demands while working on research projects in SIT.

The primary responsibility of this role is to deliver an industry innovation research project. The Research Fellow/Engineer will be part of the research to conduct a comprehensive taxonomy study of current construction processes for HDB-building typologies from which a set of recommendations for robotization and automation (R&A) solutions.

Key Responsibilities

• Participate in and manage the research project with Principal Investigator (PI), Co-PI and the research team members to ensure all project deliverables are met.
• Undertake these responsibilities in the project:
i. Conduct a comprehensive review of existing literature, standards, and industry practices related to construction work categorization and R&A in construction.
ii. Conduct site visits and collaborate with construction professionals and experts to identify the key dimensions, factors, and attributes that define construction work activities as well as robotic applications in construction.
iii. Develop a hierarchical taxonomy framework that organizes various construction tasks, processes, and roles based on commonalities and relationships with R&A consideration.
iv. Collaborate with roboticists, engineers, and technology specialists to ensure accuracy and relevance of the taxonomy's categorizations.
v. Engage in discussions and workshops to gather insights and validate the applicability of the developed taxonomy to emerging robotic technologies.
vi. Document the taxonomy development process, including methodologies, rationale for categorizations, and data sources.
vii. Prepare clear and concise reports, presentations, and publications to effectively communicate the taxonomy's structure and applications.
• Carry out Risk Assessment, and ensure compliance with Work, Safety and Health Regulations.
• Coordinate procurement and liaison with vendors/suppliers.
• Work independently, as well as within a team, to ensure proper operation and maintenance of equipment.

Requirements

• Have relevant competence in the areas of onsite HDB residential construction processes.

Research Fellow/Engineer (Robotization and Automation) - NTQ1
Singapore Institute of Technology

• Have a degree in civil engineering. Possessing a Master's or PhD degree will be advantageous.
• Knowledge of robotics will be advantageous.

Key Competencies

• Able to build and maintain strong working relationships with research team members and our industry collaborators.
• Self-directed learner who can perform an independent literature review and propose innovative modelling techniques, where applicable.
• Proficient in technical writing and presentation.
• Possess strong analytical and critical thinking skills.
• Show strong initiative and take ownership of work.
• Leadership qualities through effective mentoring/guiding of students.

Apply now
Advertised: 15 Aug 2023 Singapore Standard Time
Applications close: 31 Dec 2023 Singapore Standard Time

Contact Information

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

Contact

Singapore