Assistant Professor / Associate Professor in Robotics
Singapore Institute of Technology

Job Title Assistant Professor / Associate Professor in Robotics

Department Engineering

Institution Singapore Institute of Technology

Singapore, , Singapore

Date Posted Aug. 19, 2024

Application Deadline Open until filled

Position Start Date Available immediately

Job Categories Assistant Professor

Associate Professor

Academic Field(s) Robotics

Job Website https://careers.singaporetech.edu.sg/cw/en/job/498744/assistant-professor-associate-professor-in-robotics

Apply By Email

Job Description

Assistant Professor / Associate Professor in Robotics

Job no: 498744
Department: Engineering
Contract type: Contract
Apply now

FACULTY OPENINGS AT THE SINGAPORE INSTITUTE OF TECHNOLOGY

Singapore Institute of Technology (SIT) aspires to be a leader in innovative learning by integrating learning, industry and community. Its mission is to nurture and develop individuals who build on their interests and talents to impact society in meaningful ways.

Our engineering degree programmes have been developed through extensive consultation with industry, thus creating a curriculum that supports the industry's needs in manpower development and innovation. We look forward hire faculty with industrial experience to foster applied learning in the course being delivered.

SIT focuses on working with the industry on translational research and innovation, spanning technology readiness levels (TRLs) 3-7. Unlike traditional research which is discovery-oriented, applied research projects have higher TRLs which bridge the gap between theoretical research and industry applications. SIT Engineering Cluster focusses on the five key pillars of Applied Research (i) Infrastructure (Maintenance) (ii) Sustainability (Built Environment) (iii) Energy Resilience (iv) Maritime Engineering and (v) Advanced Manufacturing, working with various industry sectors in Singapore as well as in the region.

For this faculty position, we are looking for candidates with an engineering background, who have extensive experience in **intelligent robotic systems**.

Job Description:

SIT is seeking a highly qualified and motivated individual for the position of **Assistant/Associate Professor**. This position emphasizes excellence in teaching and applied research. As a faculty member, you will play a crucial role in shaping the education and research endeavors of our institution.

Teaching Responsibilities:

- Delivering high-quality lectures and interactive classes in topics related to robotics, robot operating system (ROS), system engineering, computational mathematics, C/C++ programming, data structure and algorithm, artificial intelligence (AI) and machine learning at the undergraduate level.
- Developing engaging course materials, including syllabi, lecture notes, assignments, and

assessments, in accordance with established curriculum guidelines.
- Employing innovative teaching methods and technologies to enhance student learning experiences.
- Mentoring and advising students on academic and career-related matters.
- Evaluating and providing constructive feedback on student performance, including assessments and projects.
- Actively engaging in academic research to stay up-to-date with the latest developments in the field.

Applied Research Responsibilities:

- Conducting cutting-edge research in autonomous system, human-robot interaction, AI for robotics and AI-driven control system, with an emphasis on practical applications and industry relevance.
- Seeking external funding and grants to support research projects and initiatives.
- Collaborating with colleagues, both within the institution and externally, to foster interdisciplinary research and contribute to the overall research goals of the department.
- Publishing research findings in reputable journals and presenting at conferences and symposia.
- Supervising graduate students in their research work and guiding them to facilitate their success.
- Engaging with industry partners and stakeholders to develop collaborative research projects and foster technology transfer.

General Responsibilities:

- Actively participating in departmental meetings, committees, and other administrative tasks as required.
- Contributing to the continuous improvement and development of the curriculum, course materials, and teaching methodologies.
- Demonstrating a commitment to fostering an inclusive and diverse learning environment.
- Engaging in professional development activities to enhance teaching and research skills.
- Promoting the institution's reputation through active involvement in professional societies and organizations.

Assistant Professor / Associate Professor in Robotics
Singapore Institute of Technology

Qualifications:

- A Ph.D. in a relevant field, such as Robotics, Mechanical/Electrical Engineering, Mechatronics, Computer Science, or a closely related discipline.
- Strong experience in mechatronic system design, robotic perception, autonomous system, human-robot interaction and integration of sensors/ actuators with robotic system.
- Proficiency in programming languages such as C, C++ and Python, ROS, AI and machine learning, and their application to robotics.
- Significant experience in applied research, with a focus on practical applications in industry.
- Experience in securing external research funding and managing research projects.
- Strong communication and interpersonal skills to effectively engage with students, colleagues, and industry partners.
- The ability to work collaboratively in a team-oriented academic environment.
- A commitment to promoting diversity, equity, and inclusion in education and research.

Successful candidates will join the Engineering (ENG) Cluster (one of five academic clusters in SIT), as members of a team of accomplished experts passionate about higher education and deeply involved in industry transformation through applied research programmes.

Apply now
Advertised: 19 Aug 2024 Singapore Standard Time

Contact Information

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

Contact

Singapore