Research Associate (Robust perception in adverse environment)
Nanyang Technological University

Job Title	Research Associate (Robust perception in adverse environment)
Department	Centre for Advanced Robotics Technology Innovation
Institution	Nanyang Technological University Singapore, , Singapore
Date Posted	Feb. 21, 2024
Application Deadline	Open until filled
Position Start Date	Available Immediately
Job Categories	Professional Staff
Academic Field(s)	Robotics Engineering - Other
Job Website	https://ntu.wd3.myworkdayjobs.com/en-US/Careers/details/Research-Associate--Robust-perception-in-adverse-environment-_R00016263
Apply By Email	

Job Description

Centre for Advanced Robotics Technology Innovation (CARTIN) is looking for a candidate to join them as a Research Associate, in the area of robotic perception and navigation in a project that aims for firefighting scenarios. The perception algorithms are to be deployed in the real world adverse environments, where the heavy smoke, water spray and thick mist degrade the performance of sensors severely.

The successful candidate will work with Prof. Danwei Wang and a group of Research Fellows,

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Research Associates, and Ph.D./Masters/Bachelors students in the School of Electrical and Electronic Engineering (EEE) at Nanyang Technological University, Singapore.

Key Responsibilities:

- Perform research, development, implementation, and experimentation of the perception algorithm for mobile robots in firefighting semi-outdoor environments

- Solve challenges in perception in challenging environments, including detecting people trapped in fire, firemen, and other mobile robots, detecting featured structure in the building, etc

- Develop deep learning models with lightweight and accurate perception results and project the results to the built map

- Responsible for robot design and implementation

- Handle other engineering support on software

Job Requirements:

- Master degree in computer vision, robotic perception or relevant majors

- Familiar with deep-learning based models for detection, semantic segmentation, and multi-sensor fusion algorithm

- Strong skills in python, Matlab, Linux, and experience with ROS, and code management tools (git)

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Experience with autonomous robotics platforms, and perception algorithms with different sensors (4D radar, 3D LiDAR, RGBD cameras, thermal cameras, IMU)

- Good verbal and written communication skills in English to perform research

- Experience in industrial product commissioning and delivery

- Experience with real-world robot system design and integration

We regret to inform 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

Centre for Advanced Robotics Technology Innovation

Nanyang Technological University

Singapore