Disaster Robotics Category

インフラ・災害対応カテゴリー

SHINOBI (Japan)



Development point

Our robots have various abilities required for rescue activities, such as mobility, arm task and sensing, and they have realized high overall performance.

In particular, our latest robot is expected to have higher performance for mapping and autonomous mobility, since it is now equipped with two 3D LiDARs in front and rear.



Team Introduction

[Inspiration, motivation to form a team]

As a step for the social implementation of our research results, we want to develop robots which play an active role in practical situations like a competition. In addition, we would like to gain know-how to develop and operate disaster response / infrastructure inspection robots through robot development and operation at competitions.

[Future outlook]

Robots developed in SHINOBI has an experience of participating in practical disaster response activities. As the future outlook of our team, we are aiming at social implementation of such kind of disaster response / infrastructure inspection robots.

Role	Name	Affiliation	Research Topic
Leader	Tatsuya Takemori	Kyoto Univ., Matsuno Lab., Researcher	Control and development of snake robots and rescue robots
Member (Software)	Wang Xixun	Kyoto Univ., Matsuno Lab., D5	Object grasping by automatic control of a robot arm
	Ryosuke Koike	Kyoto Univ., Matsuno Lab., M2	Optimization of robot structure and control
Member (Hardware)	Yuto Fukao	Kyoto Univ., Matsuno Lab., D2	Coordinated transportation control of swarm robots
	Tsubasa Kitada	Kyoto Univ., Matsuno Lab., M2	Angle / vibration control of a 1-link flexible arm
	Takumi Yamada	Kyoto Univ., Matsuno Lab., M2	Mathematical elucidation of quadrupeds' running principle
	Ryohei Michikawa	Kyoto Univ., Matsuno Lab., M2	Development of tactile presentation device
	Shota Tanaka	Kyoto Univ., Matsuno Lab., M2	Target enclosure control of swarm robots
	Yuki Morimoto	Kyoto Univ., Matsuno Lab., M1	Transportation control of space robots for flexible structures
	Ryohei Morita	Kyoto Univ., Matsuno Lab., B4	Developing robots through abundant experience in Robocon



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