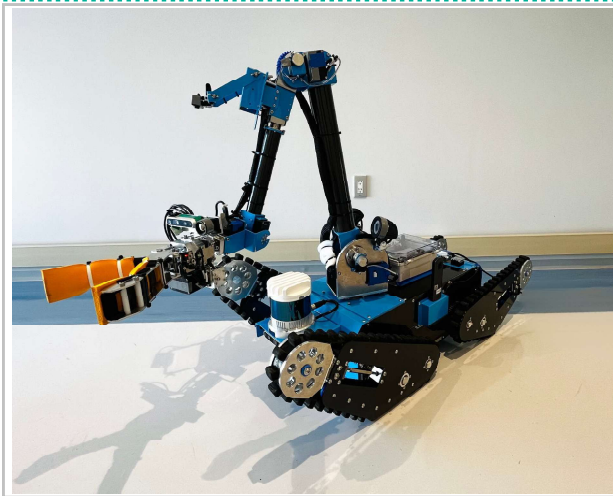


Plant Disaster

Challenge

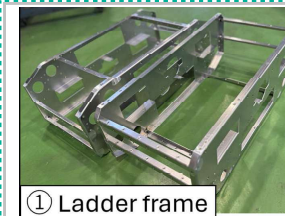
MISORA+UoA

Japan/Fukushima



Key Development Points

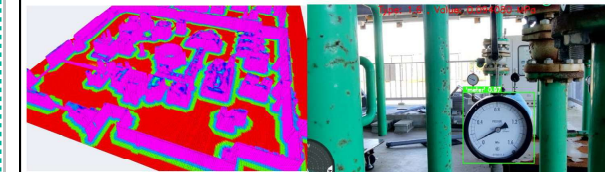
- ① Carbon frame for strength & lightness;
- ② semi-auto arm & torque hand ease use;
- ③ 3D SLAM + 2.5D maps for autonomy;
- ④ vision automates gauges, QR, cracks.



① Ladder frame



② 6DoF-Arm + Gripper



③ 2.5D Map

④ Auto-read gauges value

Team Introduction

Inspired by lessons from the Great East Japan Earthquake, we aimed to build robots useful on site. Our team includes a development firm and University of Aizu students.

We aim to expand beyond disaster response robots into agriculture, forestry, fisheries, and construction.



Team Leader
Robot Operator 1
Robot Operator 2
Safety Manager

Yuma Matsumura
Yuki Nagasawa
Takeo Numao
Taiga Sasaki

Kufusha Inc.
University of Aizu Graduate School
HAMA, Inc.
Kufusha Inc.
Takawaseimitu Co., Ltd.

Robot Development (SLAM Navigation)
Robot Development (Image Recognition)
Robot Development (Drone Operation)
Robot Development (Arm Control)
Robot Development (Hardware Design and Production)

Assistant
Network Manager
Member
Member

Role

Shouta Hasegawa
Rui Iwata
Ichirou Onishi
Teruaki Kanbayashi

University of Aizu Graduate School
Kufusha Inc.
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Affiliation/Position

Robot Development (Image Reporting Program)
Team Management
Robot Development (Mechanical Design and Development)

Areas of expertise, research fields

Contact Information Minamisoma Robotics Industry Council Secretariat (Yume Support Minamisoma Co., Ltd.)

Websites, etc. <https://misora.minami-soma-ric.jp/>