ODENS (Japan)

Disaster Robotics Category
インフラ・災害対応カテゴリー

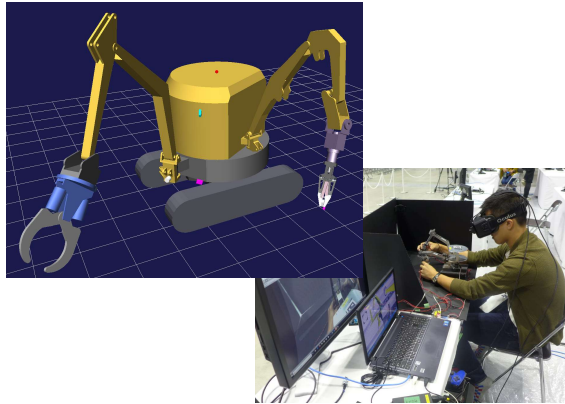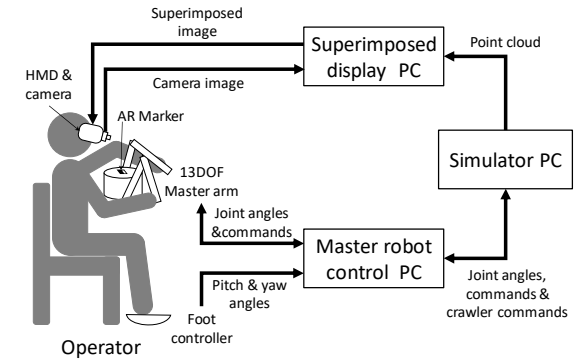## Development point

The robot is a standard model "Double Arm" with additional devices such as a camera. On the other hand, the operation system is originally developed to demonstrate our proposed "Third-Person-View AR Master-Slave Method". This method is an operation interface that superimposes 3D sensor data and the master arm using AR technology.

Introduction of your team

【Inspiration, motivation to form a team 】 In 2016, we participated in JVRC and realized the difficulty of tele-operation in unknown narrow environment. Then we proposed "Third-Person-View AR Master-Slave Method". In order to demonstrate it, we participated in WRS2018 and won the 3rd place, but could not fully utilize the proposed method. In this competition we will try again.

【Future outlook】Effective display method of point cloud data and superimposed display without markers. To verify the proposed method for a real robot.

Role	Name	Affiliation/Title	Specialty, Field of study
Team leader	MASUTANI Yasuhiro	Osaka Ele.-Comm. Univ., Professor	Robotics, Mechatronics
Operation system	MORISHITA Hideharu	Osaka Ele.-Comm. Univ., MC 2nd	Computer Science, Research on tele-operation
Display system	AKIMOTO Yuki	Osaka Ele.-Comm. Univ., MC 1st	Computer Science, Research on tele-operation
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