

# OCU-KDEL (JAPAN/OSAKA)

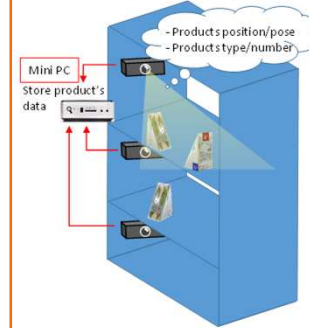


## Development point

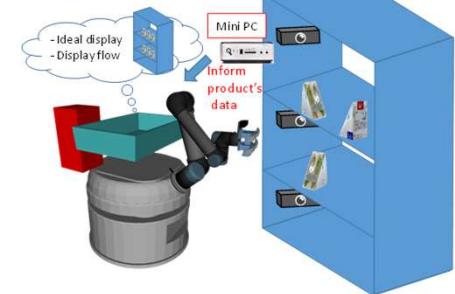
### Product position recognition and display/disposal planning functions on Intelligent Shelf

For product recognition, the position and type can be confirmed with the cameras mounted on the shelf, and the information obtained can be used to plan the display and disposal of products.

1. Intelligent Shelf
  - Check products by sensors



2. Mobile Robot
  - Bring new products
  - Got product's information from the shelf
  - Plan displaying products



## Introduction of your team

**【Inspiration, motivation to form a team】**

The FCSC inspired us to apply the study on mobile manipulator to applied research for the help of our daily life. The various difficulties have created ideas for our research.

**【Future outlook】**

As an idea to assist product recognition and manipulation, a magnet tag is proposed.

Role	Name	Affiliation/Title	Specialty, Field of study
Team leader	TAKESHI NAKAMURA	Osaka City University, 1 year's master	Product recognition and display/disposal planning system for Intelligent Shelf
	RIKO SUGIYAMA	Osaka City University, 1 year's master	Product display using electromagnet hands and magnet tags
	RIKA HASHIZUME	Osaka City University, 4th year undergraduate	Gripping plan using image recognition
	HIROSHI SHIMAMOTO	Osaka City University, 4th year undergraduate	Control of mobile manipulators using model predictive control
	SHUNSUKE KUSUMOTO	Osaka City University, 4th year undergraduate	Product position / orientation recognition using 3D point cloud information
	TOMOHITO TAKUBO	Osaka City University, Professor	



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