HARChuo　(Tokyo, Japan)

Service Robotics Category
サービスカテゴリー

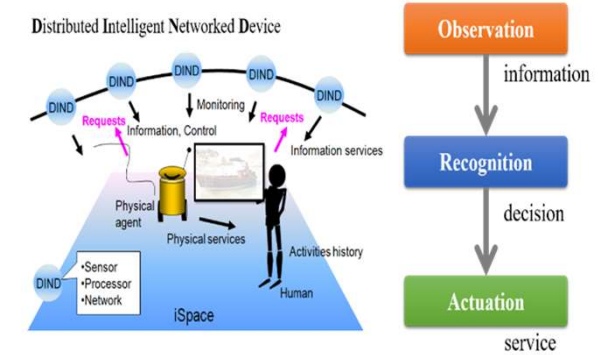## Development point

We propose a convenience store with spatial intelligence technology. We believe that if we can make the space intelligent by using sensor information placed in the convenience store, it will contribute to reduce the burden of workers and improve the usability of customers. In this conference, we will demonstrate a purchase promotion, product guidance, and monitoring service.

Distributed Intelligent Networked Device

Observation — information
Recognition — decision
Actuation — service

Introduction of your team

【Inspiration, motivation to form a team 】
HARChuo belongs to the Human System Laboratory, where we are studying the symbiosis of humans, robots, and space. We believe that interfaces and navigation robots for realizing spatial intelligence can play an important role in customer service at convenience stores. Therefore, HARChuo will challenge the customer service task in the Future Convenience Store Challenge.

【Future outlook】
We hope that convenience store owners will use spatial intelligence technology to develop a variety of services. In the future, we would like to develop new services such as shoplifting prevention using sensor information.

Role	Name	Affiliation/Title	Specialty, Field of study
Team leader	Gakushi Maruyama	Chuo University, Human system Laboratory, 2 year's master	Neuroergonomics, functional Near-Infrared Spectroscopy
Overall control	Shinnosuke Kato	Chuo University, Human system Laboratory, 2 year's master	Machine Learning
Space recognition control	Takahiro Hashimoto	Chuo University, Human system Laboratory, 2 year's master	Environment map building
UI design	Yuya Sugimoto	Chuo University, Human system Laboratory, 2 year's master	Human-robot collaboration
Guidance robot design	Takehiro Yamazaki	Chuo University, Human system Laboratory, 2 year's master	Smart electric wheelchair navigation
Humanoid robot control	Kaori Shibagaki	Chuo University, Human system Laboratory, 2 year's master	Human-robot communication
Guidance robot control	Ken Kitamura	Chuo University, Human system Laboratory, 1 year's master	Smart electric wheelchair navigation
Guidance robot control	Yuki Ikeguchi	Chuo University, Human system Laboratory, 1 year's master	Human-robot communication
Application development	Jumpei Shiga	Chuo University, Human system Laboratory, 1 year's master	Virtual reality, Haptic interface
Overall control	Atsushi Sugimoto	Chuo University, Human system Laboratory, 4 year's bachelor	Intelligent Space, Human activity assistance

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