

WORKSHOP1

WORKSHOP ON ROBOTS AND MOBILITY FOR COMMUNITY SERVICE

OBJECTIVE

In Japan and other developing countries, the aging society is becoming an important issue. There are high expectations for robotics technologies, mobility support, and automated driving vehicles to support our society especially elderly people to improve their quality of life. Furthermore, COVID-19 has changed our living lifestyle, especially Asia citizens. Therefore, it is necessary to provide small mobility assistance and fine care by robotic technologies.

Hence, we aim to conduct research and to develop new mobilities and robot technologies from East Asia to be ahead of the rest of the world. For that purpose, this workshop will introduce the current state of technologies and discussions how to cooperate. Each university will introduce its ongoing and future projects for mutual understanding and further collaboration.

ORGANIZERS

Prof. Toshio Ito, SIT

Prof. Toshihiro Kose, SIT

Prof. Dr. Aroonsri Nuchitprasittichai, SUT

PROGRAM

Date: February 23, 2023

Place: Onsite B408

Online: Zoom ID = 3700032565

Agenda:

15:15-15:20 : Opening

15:20-16:30 : Presentations (10 mins incl. QA)

1. [SIT] STUDY ON EXTERNAL RECOGNITION BY POINT CLOUD USING MACHINE LEARNING

Toshio Ito and Hayato Takahashi

2. [SIT] DEVELOPMENT OF MOBILE ROBOT CONTROL PLATFORM USING ROBOT SERVICE NETWORK PROTOCOL

Takeshi Sasaki and Nobuto Matsuhira

3. [HUST] INEXPENSIVE STEREO SYSTEM ON MOBILE ROBOT USING PSMNET FOR DISPARITY MAP ESTIMATION

Thai La, Hung Hoang and Linh Tao

4. [HUST] ROS-BASED FRAMEWORK FOR NAVIGATION SYSTEM OF AUTOMATIC GUIDED VEHICLES APPLIED IN INDUSTRIAL WORKSHOP

Truong Minh Thong, Pham Trung Nghia and Pham Duc An

5. [KMUTT] AUTONOMOUS MOBILE ROBOT IN HOSPITAL:PRODUCT DESIGN AND DEVELOPMENT PERSPECTIVE

Supachai Vongbunyong, Kitti Thamrongaphichartkul

6. [SUT] ROUTE MANAGEMENT FOR MULTIPLE AUTONOMOUS MOBILE ROBOT

Phuwanat Phueakthong, Jittima Varagul and Nattawat Pinrath

7. [SUT] THE USE CASE OF AUTONOMOUS MOBILE ROBOTS FOR MATERIAL HANDING IN AN INDUSTRIAL PLANT

Saw Yi Wai Yan, Phuwanat Phueakthong, Nattawat Pinrath and Kontorn Chamniprasart

16:30-16:35 : Discussions

16:35-16:55 : Virtual Tour on Manufacturing Automation and Robotics Engineering in SUT

16:55-17:00 : Closing