## A dwelling proposal combining private and common space based on survey of house-sharing

Principal Investigator: Kentaro Honma (Assistant Prof., Inst. of Industrial Science, the Univ. of Tokyo)

Co-Investigator: Kotaro Imai (Prof., Inst. of Industrial Science, the Univ. of Tokyo)

Co-Investigator: Takatoshi Arai (Assistant Prof., Inst. of Industrial Science, the Univ. of Tokyo)

Co-Investigator: Toshihiro Yano (Project Researcher, Inst. of Industrial Science, the Univ. of Tokyo)

Collaborator: Junko Tamura (Assistant Prof., National University of Singapore)

Collaborator: Tomohiko Komatsu (Master's Student, Graduate School of the Univ. of Tokyo)

Nowadays, the number of single-person household has drastically increased reaching up to almost one third of the total number of households in Japan. The growing interest of house-sharing arising in the city areas are mainly a consequence of this changes in the demography. Therefore, the aim of the research is to provide concrete guidelines for shared accommodation designs, which will take into consideration rich spatial qualities that focus primarily on common areas.

We regard house-sharing in Singapore as a suggestive example for our country because living conditions in Singapore are similar to Japan. This research provides survey summaries of interviews and questionnaires to 37 residents in 17 shared apartments in Singapore (including 16 public housing, the HDB flats) and 23 residents in 6 shared apartments in Japan. The questionnaires contain time-series patterns of the individuals inside their housing unit (when, where and what type of activities residents do with whom) and ownership of goods (identification of personal belongings and shared goods), in addition to basic information such as age, occupation and the rent. We clarified statistically correlation between the time lengths of activities in common space and housing and resident characteristics by analyzing survey results. The results of surveys are reported in this paper with floor plans and images of each unit.

Currently, authors who research architectural planning and city planning are designing a shared student hall.

Authors will verify practical effectiveness of this achievement to apply its design implications.