

4.6 ロボットの自律制御

個人対応の移動ロボットとモバイル情報機器を用いた生活支援のための人間活動の仮想化技術の研究

Human activity virtualization for daily life support using a personal mobile robot and digital devices

Wee Hong Ong

In the modern society, human activity support or assisted living technologies are useful to address various social needs such as personal assistant and elderly care. However, such technologies have not been accessible to average people in real home setting due to the expensive infrastructure requirement. This research study the solution with a system composed from affordable consumer devices-personal digital devices and low-cost mobile robot. Currently, we are working on the core functionality of such system: human activity recognition. We are taking the approach of unsupervised learning to detect human actions with features constrained by human range of movements. Unsupervised human activity recognition will be an enabling technology for self-learning human activity support intelligent systems, be smart space or personal assistant robot.