Applying data mining/machine learning to possibly autonomous mobile robots which would be commonly used in the future

In Suzuki Laboratory, we are conducting research on discovery/learning capability of low-cost robots that think and act by themselves. A main goal is long-term monitoring of humans. We are developing classification, clustering, and abnormal detection techniques from sequences of images, skeleton graphs, and sensor readings.

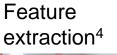
Human monitoring (forthcoming)

Abnormal detection¹

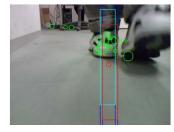


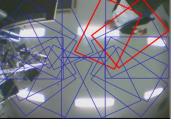
Human pursuit²

Human detection³













Examples of our robots



References

- 1. [Suzuki, Matsumoto, Kouno DS'12]. 2. [Deguchi, Suzuki a Nat'l Conf'12].
- 3. [Matsumoto, Sebag, Suzuki ISCIS'11]. 4. [Takano, Loshchilov, Meunier, Sebag, Suzuki AmI'13].
- 5. [Kouno, Takayama, Suzuki IAT'12].