

# I-SP01

## Invited Session

13:00-15:00  
Room : C105

Chair : Tahk Min Jea (KAIST)

---

13:00 – 14:00

I-SP01-1

### Cognitive and Behavioral Intelligent Artificial Liferobot

Yong-guang Zhang  
( Academia Sinica, Beijing )

The paper describes a new type of robot called “artificial liferobot” which is able to learn, make decisions, and behave by itself based on a brain-type computing technique called “artificial brain”. The artificial liferobot has self-learning ability from the environment by the interactions between human being and it. The artificial brain makes the artificial liferobot to behave by itself with its intensions like living things as human being. We briefly introduce one attempt of our researches for developing cognitive and behavioral intelligent artificial liferobot in our laboratory. One of our purposes is the development of the artificial liferobot, which plays an important role in taking care of elderly and infirm people in a rapidly aging society.

14:00 – 15:00

I-SP01-2

### A New Speaker Adaptation Technique using Maximum Model Distance

S. Kwong\* (City University of Hong Kong)  
H. He\*\*( South China University of Technology)

This paper presented a adaptation approach based on maximum model distance (MMD) method. This method shares the same framework as they are used for training speech recognizers with abundant training data. The MMD method could adapt to all the models with or without adaptation data. If large amount of adaptation data is available, these methods could gradually approximate the speaker-dependent ones. The approach is evaluated through the phoneme recognition task on the TIMIT corpus. On the speaker adaptation experiments, up to 65.55% phoneme error reduction is achieved. The MMD could reduce phoneme error by 16.91% even when ...