

Japanese Greetings with Pepper Robot

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Overview



Completed

- Basic implementation of Speech Recognition.
- Implementation of Age Detection.
- Implementation of Attire Detection.
- Implementation of Japanese bows through python script based on age.

In - Progress

- Ability to run all modules together.
- Contextual MAB.
- Teaching the duration.

Contextual MAB – what to pick?

Discretized MAB actions

- Dividing duration into bins.
- Assigning each bin a reward for a particular bow.

Continuous MAB actions

- Treating the duration as a continuous action.
- Reward: Binary or a range?

Alternative backup

- We can implement a MAB that takes the age as the bandit.
- The duration would be the action.

Possible Future work

- Better implementation of the Speech Recognition.
- Move Pepper physically for the following possible reasons:
 - Pepper cannot detect age due to environmental light (*ex:sunlight*).
 - Increase or decrease the distance between the individual to get better.