CADT Beamer Poster Template

Author 1, Author 2, Author 3

Department of Engineering Science, Cambodia Academy of Digital Technology

{author1,author2,author3}@cadt.edu.kh

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1. Introduction

- **Symbol Grounding $\times$ Chatting**
- Research on language acquisition and symbol grounding (focus on the acquisition of physically grounded knowledge through utterances that express physical things, such as objects and motions)
- Most of the previous studies have focused on learning without any prior symbolic knowledge
- The problem of how to acquire physically grounded knowledge based on grounded utterances through natural interaction has yet to be explored
- We focus on object-teaching utterances as grounded utterances

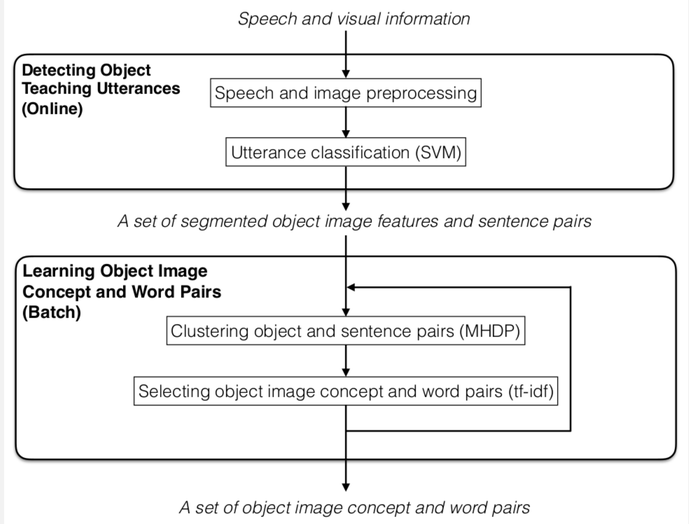
2. Experimental Environment

3. Example Dialogue

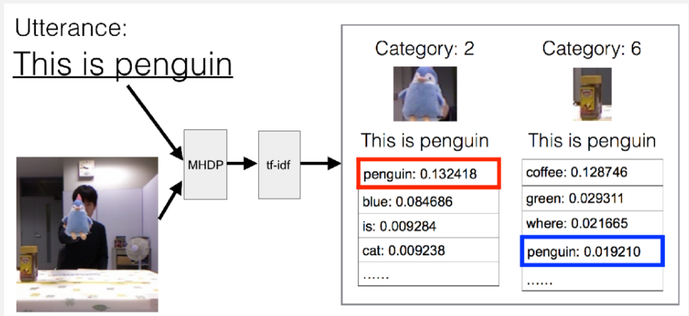
- Some examples of dialogue between human and robot:

Do you know any toys?	I am not familiar with toy.
Here is the stuffed toy.	Oh, I see.
Do you like animals?	I like dogs.
I like this penguin.	I got it.

4. Propose Method



5. Learning Method (MHDP+tf-idf)



6. Experimental Setup

The ten objects used in the experiment are: two black stuffed toy cats (small & big), two stuffed toy fishes (red & yellow), and two cups (red & yellow)

7. Results

Results...

Table 1:Results of learning accuracy of object and words (%)

without loop	31% (61/196)	30% (59/196)	10% (19/196)
with loop	35% (69/196)	57% (112/196)	28% (54/196)

Here,

- P_w: probability of selecting correct word in each sentence
- P_c: probability of selecting object image concept for each sentence
- P_{wc}: probability of selecting both correct word and object image concept for each sentence
- Result: without loop $<$ with loop

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References