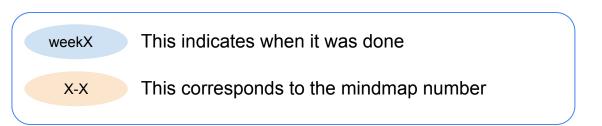
MSc Project 2021

Title: Estimating personality in communication Name: Yuichi Midorikawa



1. Summary of actions agreed during last meeting

- 1-1. I shared a short paragraph summarising my idea.
- 1-2. Decided on input and output data (I have to find out specific data set.)
- 1-3. Research Steps $(1 \sim 6)$

Research Title and Abstract

Title: Estimation of personality/sentiment in communication

Abstract:

- 1. I obtain (1) text data (content of conversation) and (2) hand gesture (or face) from videos of people talking.
- 2. Using the data in (1), perform (3) sentiment extraction (e.g., Positive, Negative, Neutral).
- 3. Using the data from (2) and (3), evaluate and analysis the both sentiment in communication.



What I want

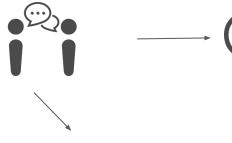
(1) My main goal:To improve the communication between virtual agents in some way.

(2) My objective for this project:
This project will focus on the relationship between hand gesture/face and personality in communication. (This is my research question)

Research Steps

- 1. capture a dataset that contains people talking and the text of what they say.
- 2. using the conversation text, do sentiment analysis (A)

6. evaluate and analyse the results.

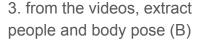


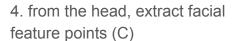


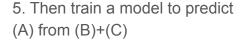






















Research Steps

- 1. capture a dataset that contains people talking and the text of what they say.
- 2. using the conversation text, do sentiment analysis (A)
- 3. from the videos extract people and body pose (B)
- 4. from the head, extract facial feature points (C)
- 5. Then train a model to predict (A) from (B)+(C)
- 6. evaluate and analyse the results.

2. Summary of work done & results this week

2-1. Created a time plan

Time Plan		Oct				Nov				Dec	My Progress		
	Task	4	11	18	25	1	8	15	22	29	6	Status	week1
Step		week1	week2	week3	week4	week5	week6	week7	week8	week9	week10		No)
	capture a dataset that contains people talking and the text of what they say.	1					buffer				buffer	Running	
	1-1. Find a dataset to use	1-1										Running	Yes
2	using the conversation text, do sentiment analysis (A)	2										Running	
	2-1. Find a model to use	2-1										Running	Yes
	2-2. Using the model and its data set, perform sentiment analysis		2-2									-	
3	from the videos, extract people and body pose (B)	3										Running	
	3-1. Find a model to use	3-1										Running	
	3-2. Using the model and its data set, extract body pose		3-2									-	
4	from the head, extract facial feature points (C)	4										Running	
	4-1. Find a model to use	4-1										Running	
	4-2. Using the model and its data set, extract facial points		4-2									-	
5	Then train a model to predict (A) from (B)+(C)			5								-	
	5-1. Predict (A) from (B) + (C)			5-1								-	
6	evaluate and analyse the results.				6							-	
	6-1. Decide a evaluation metrics				6-1							-	2-1
	6-2. evaluate and analyse the results					6-2						-	2.4
7	Write a paper							7				-	3-1

Time Plan		Oct				Nov				Dec	My Progress		
Step	Task	4	11	18	25	1	8	15	22	29	6	Status	week1 — Question (res/
		week1	week2	week3	week4	week5	week6	week7	week8	week9	week10		
	capture a dataset that contains people talking and the text of what they say.	1					buffer				buffer	Running	
	1-1. Find a dataset to use	1-1										Running	Yes
2	using the conversation text, do sentiment analysis (A)	2										Running	
	2-1. Find a model to use	2-1										Running	Yes
	2-2. Using the model and its data set, perform sentiment analysis		2-2									-	
3	from the videos, extract people and body pose (B)	3										Running	
	3-1. Find a model to use	3-1										Running	
	3-2. Using the model and its data set, extract body pose		3-2									-	
4	from the head, extract facial feature points (C)	4										Running	
	4-1. Find a model to use	4-1										Running	
	4-2. Using the model and its data set, extract facial points		4-2									-	
5	Then train a model to predict (A) from (B)+(C)			5								-	
	5-1. Predict (A) from (B) + (C)			5-1								-	
6	evaluate and analyse the results.				6							-	
	6-1. Decide a evaluation metrics				6-1							-	2-1
	6-2. evaluate and analyse the results					6-2						-	2.4
7	Write a paper							7				-	3-1



3. Questions to be discussed during the meeting (1/2)

How to find dataset?

3-2

I am looking for a dataset of TV shows etc but cannot find one.

What is the appropriate data set for this study?

How can I find a data set?

If you have any advice, please let me know.

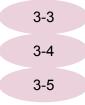


3. Questions to be discussed during the meeting (2/2)

I'm looking for the following model, but haven't found it.



- B. A model for extracting body posture from video
- C. A model for extracting facial expressions from video



How can I find above models?

If you have any advice, please let me know.



4. Proposed objectives for next week

- 4-1. I will look for datasets and models to use in this project(from research paper and internet) (step1-1, 2-1, 3-1, 4-1)
- 4-2. I will perform sentiment extraction using the text of the conversation (step2. 2-2)



5. Articles read this week

5-1. Estimating User's Engagement from Eye-gaze Behaviors in Human-Agent Conversations (No.1)

https://dl.acm.org/doi/10.1145/1719970.1719990

VIBE: Video Inference for Human Body Pose and Shape Estimation [CVPR-2020]

https://github.com/mkocabas/VIBE

Emotion Classification in Short Messages

https://github.com/lukasgarbas/nlp-text-emotion

end