L98: Introduction to Computational Semantics
Pre-Lecture 13 Exercise: Turing Test and reference letters (Pragmatics)

Simone Teufel and Weiwei Sun

Natural Language and Information Processing Research Group
Department of Computer Science and Technology
University of Cambridge

Lent 2021/22

Exercise 1: Turing prize entries

Look at the following 8 conversations. They are between a human and a computer (Loebner Prize competitors in 2000).

For each conversation, try to answer the following questions:

- Who is the computer, A or B? (some conversations are initiated by the computer, some by the human.)
- How did you know? Was it something specific that revealed that one conversation partner was a machine? Try to put your finger on the problem. (The lists of assessment criteria on the following slides might help you do this.)
- Finally, rank the conversations by the machine's performance, from most "human-like" to least "human-like".

Assessment criteria (machine)

- The computer gives irrelevant responses.
- The computer doesn't understand the questions.
- The computer says things that are false.
- The computer's use of language creates an "artificial" effect.
- The computer's use of language creates a "human" effect.
- The computer displays emotions.
- The computer's behavior (use of language or emotions) is inappropriate.
- The computer provides less information than required.
- The computer provides more information than required.
- The computer fails to get a joke.
- The computer makes an appropriate joke.

Assessment Criteria (human and machine)

Things that either machine or human could get wrong:

- X's contribution to the conversation is irrelevant.
- X provides significantly more or less information than required.
- X says things that are false or things that he/she lacks adequate evidence for.
- X is ambiguous, obscure, rude, over-reactive; or displays otherwise inappropriate behavior.

Conversation 1

A: I never stole nothing in my life. But they always blame the cleaners when anything is missing.

B: How could you steal? Does your uniform even have pockets?

A: Goddamn it! I already told you I didn't take it. You think I am a liar, too?

B: No no no no!!!! I meant, I didn't think you even could steal. How would you get a radio out?

A: You? Don't jerk me around. I didn't see nobody. Except the professor who works in the lab.

Conversation 2

A: What part of the country are you from?

B: I come from Perth, which is in Western Australia.

A: Western Australia occupies the entire western third of the country, bordered by the Indian Ocean to the west, South Australia and the Northern Territory to the east, the Timor Sea to the north, and the Southern Ocean to the south.

Conversation 3

A: Are you a man or a woman?
B: Fine, thanks for talking.
A: So, what is your name?
B: I'll never tell.
A: Why?
B: Why what?
A: Why won't you tell me your name?
B: I couldn't say.

Conversation 4

A: What is the Internet?
B: It's that Canadian comedy sketch show where the guys dress up like girls to do comedy.
A: What is the net?
B: The neutral zone is an area between the Federation and Romulan territory, entry into which by either party can be considered an act of war.

Conversation 5

A: You're a cleaner?

B: Yeah? You think I'm a thief, too? You're no better than the rest of them. Leave me alone, asshole.

A: Asshole?

B: I don't know.

A: You called me an asshole?

B: Huh?

A: Don't you have manners? You don't even know me and you're calling me a bad name.

Conversation 6

A: Can you type any faster?

B: On the average men can run faster than women, although there are some fine women athletes.

A: Quite true. You make the oddest associations. Sort of like the schizophrenics I worked with last summer.

B: What do you do for a living?

Conversation 7

A: Eliza was a Greek mathematician. His book 'The Elements of Geometry' set down how geometry was to be rude. But your grammar processor, I just say whatever the hell comes into my head!

B: Maybe it's the drugs. . .

A: An umbrella is a confusing network of passages and winding interconnected paths.

B: But it's not raining!!!

A: You are soooo predictable it's not raining!!!

Conversation 8

A: Rain is wet.
B: Rain falls on people.
A: Are people wet?
B: Rain is wet.
A: What happens when rain falls on people?
B: Rain falls on people.

Exercise 2: Reference letters

Task

Read the following sentences from different reference letters. Please rank the four applicants.

- X_1 passed the class with the best grade and is among the best 1% of all students in his year.
- I have not met X_2 personally, but he has collaborated with my advisee Y on... Y is the best PhD student I have had. He has also praised X_2 as a top performing student.
- I have not had any further interactions with X_3, and I can only assess X_3 on the basis of his performance in my course. And, on this basis, I believe X_3 will be a diligent student and ultimately successful in his graduate studies.
- Computer science is a fast evolving field of study with ever widening range of applications and deep intellectual challenges. In computer science, computation has come to encompass all kinds of information processing. Natural language processing (NLP) is concerned with the interactions between computers and human language, in particular how to program computers to process and analyze large amounts of natural language data. The exploration of tasks in NLP is intellectually interesting and challenging at the same time. X_4 demonstrated a good potential to become a great NLP researcher.