Trilemma

Q: How do you see the trilemma of AI going forward? Will they be resolved?

[Fengchun] I advise the following further readings

https://www.linkedin.com/feed/update/urn:li:activity:7138148294098063360/ https://www.linkedin.com/feed/update/urn:li:activity:7139190508689453056/

Human-machine ecosystem

Q: Currently machines cannot completely take over human beings. But when the machine gets smarter, will humans be edged out of the ecosystem? How do you think AI/machine will be developing?

[Fengchun] Please read this paper: Bishop, J. M. (2021) Artificial Intelligence is stupid and causal reasoning won't fix it. [J]. Frontier in Psychology. 2021 (11): 1-18.

AI age limit

Q: OpenAI has a minimum age for years but they don't seem to have been enforcing it. How do you think age limits can be (1) set and (2) enforced?

[Fengchun] We had a discussion on the set and enforcement of aga restriction on Page 21 of UNESCO Guidance for generative AI in education and research. It enforcement will depend on national laws or regulations

Environmental Impact

Q: Thank you for your talk! Very important points! Really appreciate you touching upon how it threatens plural knowledge. LLMs are a reflection of our internet, not our world. In turn, its output is very Westernized and exclusionary.

[Fengchun] We had a discussion on this controversyin UNESCO Guidance for generative AI in education and research (the link to the Guidance: https://unesdoc.unesco.org/ark:/48223/pf0000386693) On page 17,

A latest study strongly validated our argument (<u>https://osf.io/preprints/psyarxiv/5b26t</u>): Researchers at <u>Harvard University</u> asked <u>#ChatGPT</u> to complete the World Values Survey, which is administered to thousands of people around the world. The scores were then compared to understand how the data used to train the model impacts stated preferences for different values. The more distant a country is culturally from the United States, the lower is the correspondence between ChatGPT responses and human responses. When we say that LLMs produce human-like responses, we should always keep in mind that the humans in questions are Western, Educated, Industrialized, Rich, and Democratic. Or, in order words, WEIRD. (Link to paper in first comment.)

Q: Do you have any thoughts/anything to add about the environmental impact of models like GPT? Is this included in some of the work your unit is doing?

[Fengchun] We had a discussion on pages 33-34 of UNESCO Guidelines for ICT in education policies and masterplans (<u>https://unesdoc.unesco.org/ark:/48223/pf0000380926</u>). In the long run, it may require a special tax. Our Unit can only reveal the issue and call on action but can't do more than.

Autonomic foundation models for education

Q: Dr Miao, can you elaborate on this?

[Fengchun]Please see more details on page 13 of UNESCO Guidance for generative AI in education and research

Regarding the controversy 8

Q: How teachers can guide students to deal with the issue of the generating deeper deepfakes? Teachers ask students to do fact check after they consulted ChatGPT. However, when they cross check the information from the internet, they may see the fake news/webpage and believe the fake information.

[Fengchun] Teacher and students can't only cross check the information through internet, they should also use human sanctioned books and sometimes need to observe the real world or conduct experiments.

UNESCO's role

Q: Thanks for a very inspiring talk! Apart from conducting theoretical research on the pros and cons of GenAI, do you think that UNESCO or the UN can take a proactive role in seeking countries' agreement to make a joint, universal effort in regulating the development of GenAI? If yes, in what ways?

[Fengchun] UNESCO has led the drafting of the Recommendation on the Ethics of AI and it was a Recommendation adopted by all Member States to regulate AI. I am not sure whether UNESCO will be able draft and adopt a specific regulatory Recommendation on GenAI. I think it very much an accountability of governments of countries like what China, USA, and Europe have done.