

Is the end of academic NLP research in sight?

A discussion moderated by Marco Kuhlmann and Joakim Nivre

With contributions from Ivan Vulić, Emily M. Bender, and Oskar Holmström

What is the future of academic NLP research?

- Three scenarios for the state of academic NLP research in 2050
- Questions for panelists:
 - How likely is the scenario?
 - How desirable is it?
 - If it is likely but not desirable, how do we take steps to avoid it?
 - If it is unlikely but desirable, how do we make it happen?

Scenario 1: Back to the ivory tower



Ivan Vulić

Academic NLP research in 2050 is confined to research topics that are uninteresting to big tech companies. This includes the use of NLP to understand human language – what some people used to call “computational linguistics”, as opposed to NLP – as well as practical applications of NLP under commercially non-viable conditions, such as historical language processing and language technology support for endangered languages.



Scenario 2: NLP as a social science



Emily Bender

Academic NLP research in 2050 is primarily concerned with understanding the application of large language models (and other AI artifacts invented since 2023) in society, partly from a technological perspective but mostly from sociological, psychological and philosophical perspectives. NLP in academia has become a truly interdisciplinary endeavor and most academic NLP groups are now based in social science faculties.



Scenario 3: Return of the Jedi



Oskar Holmström

In 2050, the development of new models and algorithms in NLP is dominated by research groups in academia, with big tech companies suffering brain drain as a result. This development was triggered by two important events: the Open AI Act adopted by the United Nations in 2032, requiring all organizations that develop AI models to share both models and training data, and the Universal Turing Machine, the world's largest computer center, sometimes referred to as the CERN of AI, co-founded and jointly owned by all the universities in the world.



Discussion