

[DeePer-AI] Decoding Persuasion: Tactics, Efficacy, and Detectability of Human and Artificial Persuasion

Imagine a world where most news, advertisements, and even political conversations no longer come from people, but from artificial intelligence (AI). Would we be able to recognise it? Would our decisions and opinions still be our own, or would we already be subconsciously following what AI suggests to us? This research project aims to understand how much AI can convince us, what strategies it uses, and what dangers arise from this. Artificial intelligence, especially so-called large language models, is increasingly boldly entering areas that have so far been the domain of humans: politics, marketing, public health, and the media. AI can write texts, conduct conversations, and even create political speeches that are not only linguistically correct but also very persuasive. This is a revolution that brings with it enormous opportunities but also serious threats.

As AI takes over the role of the main "interlocutor" on the internet, it will become increasingly difficult to distinguish what is an authentic human opinion and what is the result of algorithmic manipulation. There is a risk that we will unconsciously start making decisions under the influence of AI, without even realizing it. This is what we want to investigate: how AI convinces, how effective it is, and whether we can recognise it. As of today, AI already generates over 30% of marketing content and over 20% of online political campaigns. And it is just the beginning. Preliminary research shows that AI employs entirely different persuasion strategies than humans. For example, AI analyses our profiles and behaviours to tailor its messages in a way that makes them as convincing as possible for us. As a result, we increasingly make decisions based on arguments from "someone" who, in reality, does not exist. Furthermore, companies and individuals can use AI to influence our consumer and political choices, not always in our best interest. Over time, this may lead to a loss of trust in the internet and new technologies, as people struggle to distinguish between truth and manipulation. To this end, the project will consist of three complementary research methods implemented for a holistic understanding of this phenomenon, taking into account both linguistic analysis and experimental research:

- Linguistic analysis: We will compare hundreds of political statements, advertisements, and health communications written by humans and by AI.
- Experiments with human participants: Participants will read and evaluate various messages, part of which will be generated by AI and in part by humans. We will measure how much they change their opinions and decisions under the influence of these texts.
- Turing Tests: We will check whether people can distinguish AI persuasive messages from human ones and what features help them achieve this (e.g., style, vocabulary, argumentation style).

In this way, we propose the first such large-scale study that not only compares the effectiveness of AI and humans in persuasion but also analyses what strategies they use and whether we can defend ourselves against them. AI is redefining the way we communicate, reshaping traditional norms and strategies. It can be a powerful tool for both convincing us of good things (e.g., vaccinations or a healthy lifestyle) and for strategic manipulation (e.g., in politics or advertising). Our project will help understand how this new "art of persuasion" works, what opportunities and threats it brings, and how we can protect ourselves from them. This research marks the first step towards the development of our future capacity to consciously differentiate between human and algorithmic communicators. And for us to decide who we want to trust.