

Abstracts

Regulating the use of Artificial Intelligence (AI) in Europe: the transition from ethical to legal rules

Kostas Popotas

Abstract

AI's special nature and exponential growth rate require new ethical standards. This rapidly growing and promising group of technologies is extending constantly over broader areas of societal activity. It presents significant new opportunities but also serious risks. While it can, on the one hand, optimise existing processes, activate innovative activities, provide answers to a wide range of organisational problems, it can also create issues of surveillance, data manipulation, opacity and lack of explanation as for the decisions taken. Research in this area is also in particular need of an ethical framework. The transition from self-regulation based on ethical recommendations to posed legal rules and restrictions, an approach pioneered by the European Union, raises new problems, above all the question to what extent legal provisions can improve the protection of individuals from the introduction of AI into modern life, without hindering technical development and the possibility of positive use of artificial intelligence.

Key words: Artificial Intelligence, Ethics, Law, Law, European Union

Governance, Artificial Intelligence and Ethics, Social benefit

Dora Papadopoulou

Abstract

Artificial Intelligence is a field that in recent years is increasingly at the center of interest. The discussion focuses on its applications as a necessary vehicle of developments in all fields. The fact that its impact is multi-level on societies, cultures, economies is clearly included, strengthening the national prestige of involved countries. The main goal of this article is to offer a general introduction highlighting the aspects and arguments of the applications of Artificial Intelligence (AI) in the field of governance. The necessity of this synergy is especially emphasized. The recent argumentation regarding the need to take initiatives expressed through policies for the more effective use of Artificial Intelligence applications by mapping their limits for the common good, will be critically presented. In addition, the European framework for the promotion of these actions will be shortly introduced, demonstrating not only the risks

Abstracts

but also the benefits that must be won. Such an examination of goals, reference points of a political dialogue on AI should bring about tangible results.

Key words: Governance, Artificial Intelligence, Ethics, National AI Strategies, European Union

Real world data: Opportunities, limitations and future perspectives

Dimosthenis Panagiotakos and Viktoras Gotzamanis

Abstract

The increasing use of the internet, smart phones and other wearable devices with data recording, sending, and analysis capabilities, and a multitude of other applications that become available with new technologies have created a new source of data, the real-world data. These data have the potential to be used to confirm findings from clinical studies or basic research, but also to address issues that would not be possible to be dealt with using the traditional methods, with the ultimate goal of creating medical indications and guidelines. However, these data have some inherent limitations such as heterogeneity, inconsistency, non-representativeness of the general population and, in general, their lower quality compared to data from clinical studies, due to their large volume, the uncertified reliability of recording media and the variety of their availability in different population groups. For this reason, the use and further development of complex and innovative methods such as machine learning and artificial intelligence are required to analyze them and draw safe conclusions from them. Although much research is still needed to perfect the analysis techniques, there are already examples of real-world data being used to address challenges such as the COVID 19 pandemic, and the expectation is that in the future such data will play an increasingly important role in decision-making for public health.

Abstracts

Issues of ethics in social research

Manos Savvakis

Abstract

Ethics, as a general, principal, concept, is primarily grounded on the ancient Greek philosophical investigation and understanding of the moral life; the theoretical inquiry and the practical treatment of the critical question of “how is it possible for someone to live a moral life”. It is also significantly related to a set of normative principles and socially acceptable guidelines that can decisively influence existing thoughts and interpretations and practices concerning individual choices and collective priorities.

The question of ethics in contemporary empirical sociological/social research (quantitative, qualitative or mixed) problematizes the research community and the involved academic and social agencies in a much more intense, clear and systematic way than in previous decades. Thus, it forms a relatively independent part - obviously in communication with the rest - of a research action plan, particularly in qualitatively sociological inquiry.

Key words: ethics, ethics, qualitative and quantitative sociological research

The gender dimension in scientific research

Christina Athanasiades

Abstract

This article discusses the importance and necessity of gender mainstreaming in research and innovation. Despite progress on gender equality issues, international and European organisations are trying, through various means, to achieve both a better representation of the female population in research teams and decision-making bodies, as well as gender integration in the design and implementation of research programmes. It seems that ensuring gender equality is not only a matter of social justice but is also essential for enhancing competitiveness and the relevance of research and innovation results.

Key words: gender, gender mainstreaming, research, innovation