

ETHICAL CHALLENGES OF ARTIFICIAL INTELLIGENCE WITHIN OPEN SCIENCE

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Artificial Intelligence (AI) has emerged as a transformative force, revolutionizing various aspects of contemporary society all over the world. Concurrently, the ethos of Open Science advocates for the unrestricted sharing of scientific knowledge. However, the intersection of AI and Open Science presents a complex landscape fraught with challenges. This thesis aims to elucidate the multifaceted hurdles faced by the amalgamation of AI and Open Science, drawing upon examples from prominent European universities. It is essential to consider the historical trajectory of AI to appreciate the depth of these challenges, ethical dilemmas and privacy concerns.

One of the foremost challenges encountered in the realm of AI and Open Science pertains to ethical dilemmas and privacy concerns. As AI systems become more sophisticated, they increasingly intrude into personal spheres, leading to questions about data privacy and security. European universities, such as the University of Cambridge, have grappled with these issues in research involving AI applications in healthcare. Striking a balance between innovation and safeguarding individual rights remains a formidable task.

The advent of Artificial Intelligence (AI) has brought to the fore a myriad of ethical dilemmas and privacy concerns, resonating across various sectors of society. As AI technologies permeate healthcare, finance, criminal justice, and beyond, striking a balance between innovation and safeguarding individual rights has become an intricate challenge. This section will scrutinize these dilemmas in greater detail, highlighting the experiences of European universities as they grapple with these multifaceted issues.

The ethical dilemmas and privacy concerns surrounding Artificial Intelligence and Open Science are intricate and multifaceted. European universities, as bastions of research and innovation, are at the forefront of addressing these challenges. By meticulously navigating the complex terrain of informed consent, algorithmic fairness, data privacy, transparency, and dual-use concerns, universities are shaping the ethical foundations of AI and Open Science. Through their pioneering efforts, a more ethically grounded and responsible approach to AI is being forged, setting the stage for a future where innovation harmonizes with individual rights and societal well-being.

Open Science endeavors to democratize access to knowledge, but disparities persist. While universities like the University of Helsinki champion the cause of inclusivity, ensuring that AI technologies are accessible to all strata of society remains an ongoing challenge. Bridging the digital divide and mitigating algorithmic biases are key areas that require concerted efforts.

Open Science emphasizes collaborative efforts across disciplines and borders. However, fostering effective collaboration between AI experts, domain specialists, and other stakeholders poses challenges. Initiatives like the European University Alliance aim to promote interdisciplinarity, yet ensuring seamless collaboration remains an area that demands attention.

In the realm of academic research, universities worldwide, including those in Europe, employ plagiarism detection software to ensure the integrity of scholarly work. Tools like Turnitin, Grammarly, and Copyscape use advanced algorithms to compare submitted texts against a vast database of academic papers, articles, and online content. European universities, such as the University of Edinburgh or University of Oxford, have integrated these tools into their academic workflows to maintain high standards of originality and attribution in research output.

European universities are committed to upholding the highest standards of academic integrity. They employ robust plagiarism detection software to ensure that scholarly work is original and properly attributed. Universities like the University of Cambridge and the University of Paris-Sud utilize tools such as Turnitin, which compares submitted work against an extensive database of academic publications, websites, and other sources [1]. This helps maintain the integrity of research and publications, upholding the principles of Open Science. For instance, Oxford University has its own plagiarism strategy to determine, prevent and manage this phenomenon [2].

Moreover, the universities provide a deep work with the students to pay their attention to the main obstacles in preparing their research papers. These are forms of plagiarism, subject matter, reasons for avoiding plagiarism, unintentional ways of using and main examples of it [3].

Thus, the confluence of Artificial Intelligence and Open Science represents a powerful nexus for innovation and progress. However, navigating the intricate landscape of ethical concerns, accessibility, intellectual property, data quality, and collaboration requires concerted efforts. European universities serve as exemplars, facing these challenges head-on in their pursuit of cutting-edge research. By addressing these issues, the integration of AI and Open Science can pave the way for a more inclusive and equitable knowledge ecosystem, benefiting society at large.

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