



The Jordanian National Ethics Charter for Artificial Intelligence and its Guiding Ethical Principles

Today, artificial intelligence plays a significant role in billions of people's lives. To cope with the profound transformations AI engenders on societies and what it means to be human, regional and international stakeholders hastened to build an ethical framework for AI. For instance, on 8 April 2019, the High-Level Expert Group on AI of the European Commission presented Ethics Guidelines for Trustworthy Artificial Intelligence.¹ Furthermore, in November 2021, the UNESCO Member States adopted the Recommendations on the Ethics of Artificial Intelligence, the first global standard-setting *instrumentum* related to the subject.² Following international endeavors related to AI, the Hashemite Kingdom of Jordan adopted in August 2022 its own National Charter of Ethics for Artificial Intelligence (AI) (referred to hereunder as "NCAIE" or the "AI Charter").³

The final version of the NCAIE introduced AI as one of the most important foundations of the Fourth Industrial Revolution and the Internet of Things (IoT). Given the radical transformations that would affect our social, economic, and national security systems, the Charter requires an increase in the level of awareness and self-censorship at individual and collective levels, which makes ethical guidelines more important than legislation. An ethical framework would be more effective in guiding human conscience and behaviors when compared to coercive hard law legislation. In this context, the purpose of the NCAIE aims at finding a common ethical framework that would stem from universal and religious values, and Jordanian customs and traditions to regulate the development and use of AI in Jordan.

¹ European Commission, Shaping Europe's digital future, Ethics guidelines for trustworthy AI, retrieved from: <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>, (available on 19 Oct 2022).

² Ethics of Artificial Intelligence, retrieved from <https://www.unesco.org/en/artificial-intelligence/recommendation-ethics> (available on 19 Oct 2022).

³ Trends, Jordan approves charter for Artificial Intelligence ethics, August 5, 2022, retrieved from: <https://trendsmena.com/economy/jordan-approves-charter-for-artificial-intelligence-ethics/>, (available on 19 Oct 2022).



Definition of AI under the Jordanian AI Charter

The AI Charter broadly defines AI as “the use of digital technology to create systems which are capable of performing tasks which stimulate human capabilities, mimic their actions, analyze the surrounding environment, learn from errors over time and exhibit traits associated with the human mind such as the ability to reason and make predictions, give recommendations or support decision making or take actions that affect real or virtual environments with a degree of autonomy. Thus, these systems would have the ability to suggest the necessary alternatives and solutions to make sound decisions, show appropriate reactions to the situations faced by the digital machine, and benefit from them to achieve the task assigned to it.”

Components of AI Community under Jordanian AI Charter

AI community is constituted of five main components which interact in an interconnected system linking the real environment to the virtual one. The AI Charter engages in an individualistic approach and considers “Individuals” as the first element of the interactive system of the AI Community. The person perceived as an individual with his or her personal rights and freedoms comes at the center. Every individual in this AI community can create data. Thus, the second component of the AI community is “Data”. In this regard, AI ethics should ensure the protection, inclusiveness, diversity and the non-misuse of Data related to the Individuals composing the AI community. The third component of the AI community is the “Techniques”. The term “Techniques” refers to the technology or the innovative tools which constitute the technological platform that links the fourth component, i.e., the “real environment”, to the fifth component, i.e., the “virtual environment”. Ethical principles ought to preserve and sustain the real and natural surrounding environment and create a balance between the newly created Metaverse and the real world.



Ethical Principles for trustworthy usage of AI

The AI Charter contains 8 ethical principles to ensure the trustworthy and responsible use of AI.

First Principle: Humanity and Society

The Charter starts the listing of ethical principles by the protection of human rights and fundamental freedoms. Under this first “Humanity and Society” principle, the development of AI should not occur at the detriment of human dignity. Human agency should always supersede and humans should always maintain control over the machine. AI technology should ensure a safe, just, interconnected, and socially balanced community. This first principle prohibits any manipulation or misleading that would result from AI technology. The no-harm rule is also one of the requirements of the Jordanian AI Charter requiring no harm to be incurred at all stages of the development and use of AI technology.

Second Principle: Inclusiveness and Justice

The second principle seeks the promotion and protection of diversity, inclusiveness, and impartiality in all the stages of the development and use of AI. The “Inclusiveness and Justice” principle requires the avoidance of any bias in building an AI system, and in the collection, processing, or treatment of the data used in the development of AI. Instead, AI should be employed to eliminate all kinds of unfair discrimination and unequal opportunities.

This ethical principle invites the actors of AI community to make AI technology available and accessible to everyone in a simple manner and inexpensive fashion. Inclusiveness also embraces marginalized and less fortunate groups of people.

Third Principle: Privacy and Data

The third principle concerns the data used during the development of AI technologies and its privacy. This principle requires the lawful collection and processing of the input data used in AI development. Any data used in the process of machine feeding should occur while respecting personal data protection, Intellectual Property, and privacy laws.



The third principle, “Privacy and Data”, prohibits any digital human tracking which would undermine individuals’ independence. Furthermore, this third principle incorporates the consent requirement of the data subject when the collection or processing touches on personal data.

Fourth Principle: Transparency

Transparency in the context of AI ethics refers to the faculty of offering AI technology that can be understood and accessed by a regular user. This principle encourages the development of open-source AI models. The developers of AI tools should also be transparent and disclose the rate of accuracy, bias, and inclusiveness of the AI technology they develop.

Fifth Principle: Liability and Accountability

The fifth principle related to liability and accountability ensures that developers and operators of AI technology are accountable towards the public using their technology. This principle prohibits evasion from liability. Under the principle of “Liability and Accountability”, developers should allow users to give feedback and make complaints regarding the use of AI technology.

The Jordanian AI Charter advocates for a traditional stance towards legal liability. Under this principle, machines cannot be held liable. Accountability should always be found in natural identifiable persons. Furthermore, this fifth principle requires the adoption and implementation of reliable means of accountability and identification to enhance the chances of identifying the accountable party for the harm that occurred.

Sixth Principle: Reliability

Reliability is combining the robustness and security of the machine on one hand with innovation, flexibility, and technical development on the other hand.

The reliability principle requires also the integration of documentation at all the stages of AI development. The reliability of AI technology is protected and maintained *via* prior testing, periodic review of performance, and the autonomic development of alert systems of any defect in AI tools.



Seventh Principle: Integrity and Genuineness

The seventh principle requires integrity and genuineness in the development and promotion of AI technology. This principle prohibits the distortion, exaggeration, or the falsification of information related to AI technology.

This principle also encourages creativity, competitiveness, and innovation while at the same time urging against monopolizing the development of and access to AI.

Eightieth Principle: Environment and Sustainability – Green AI

The Jordanian AI Charter concludes AI ethics principles with environmental and sustainability considerations. The development of AI should not be undertaken at the detriment of the preservation of a sustainable green environment.

Instead, AI technology should be employed to enhance sustainability and support a green environment. The development of AI should be guided by the effective and efficient use of resources protecting the environment and reducing climate change.