

## **Fostering Fundamental Human Rights and Trustworthiness through the Utilization of Emerging Technologies: the AI4Gov Platform**

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The tremendous technological outbreaks that characterize our modern societies have evolved citizen behaviors and expectations for more responsive, trustworthy, and transparent public services and policies. In that direction, solutions, and application from the emerging domains of AI, Big Data and blockchain should safeguard the fundamental elements of human rights, as well as the respect for human dignity, freedom, equality, and democracy, and citizens should be protected from the negative impacts from the utilization of these technologies. In addition, the implementation of such solutions focusing on data-driven and evidence-based policy making purposes is associated with various challenges that have not been yet adequately addressed. These challenges encompass not just the development of these solutions, but also their integration and how their further interpretability and explainability to the policymakers and all stakeholders of the modern e-government landscape. Through this work we seek to unveil the potentials that pose from the introduction and implementation of the AI4Gov platform. It is a groundbreaking initiative designed to harness the synergies of AI, Big Data, and blockchain technologies in fostering the fundamental human rights. This innovative framework aims to leverage AI algorithms and advanced analytics to process vast amounts of data, identifying patterns and insights crucial for understanding and addressing bias and discrimination among other challenges. Moreover, the integration with blockchain ensures the immutability and transparency of data, providing a secure and decentralized platform for recording and verifying human rights-related information. Finally, the definition of the AI4Gov platform's architecture and the integration of its components follow some best principles proposed and introduced by the GAIA-X architecture, that represents a novel model for the architectural design of software and cloud systems following a federated approach. This initiative aims to ensure data sovereignty, interoperability, and trustworthiness for businesses and organizations.

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