

TOP 10 PRINCIPLES FOR ETHICAL ARTIFICIAL INTELLIGENCE



About UNI Global Union

UNI Global Union, based in Nyon, Switzerland, represents more than 20 million workers from over 150 countries in the fastest growing sectors in the world – skills and services. The Future World of Work has been one of UNI Global Union's key priorities in recent years. With a leading voice on the global political and industrial stage, UNI seeks innovative policies and partnerships to ensure an empowering digital future for all. With an urgency of now, UNI calls on all companies and governments to engage with the union movement, to co-create a just transition to a future of decent work. From the design of new technologies, AI and algorithms, to the impact on the end-user, ethical and social considerations must be made that put people and planet first.



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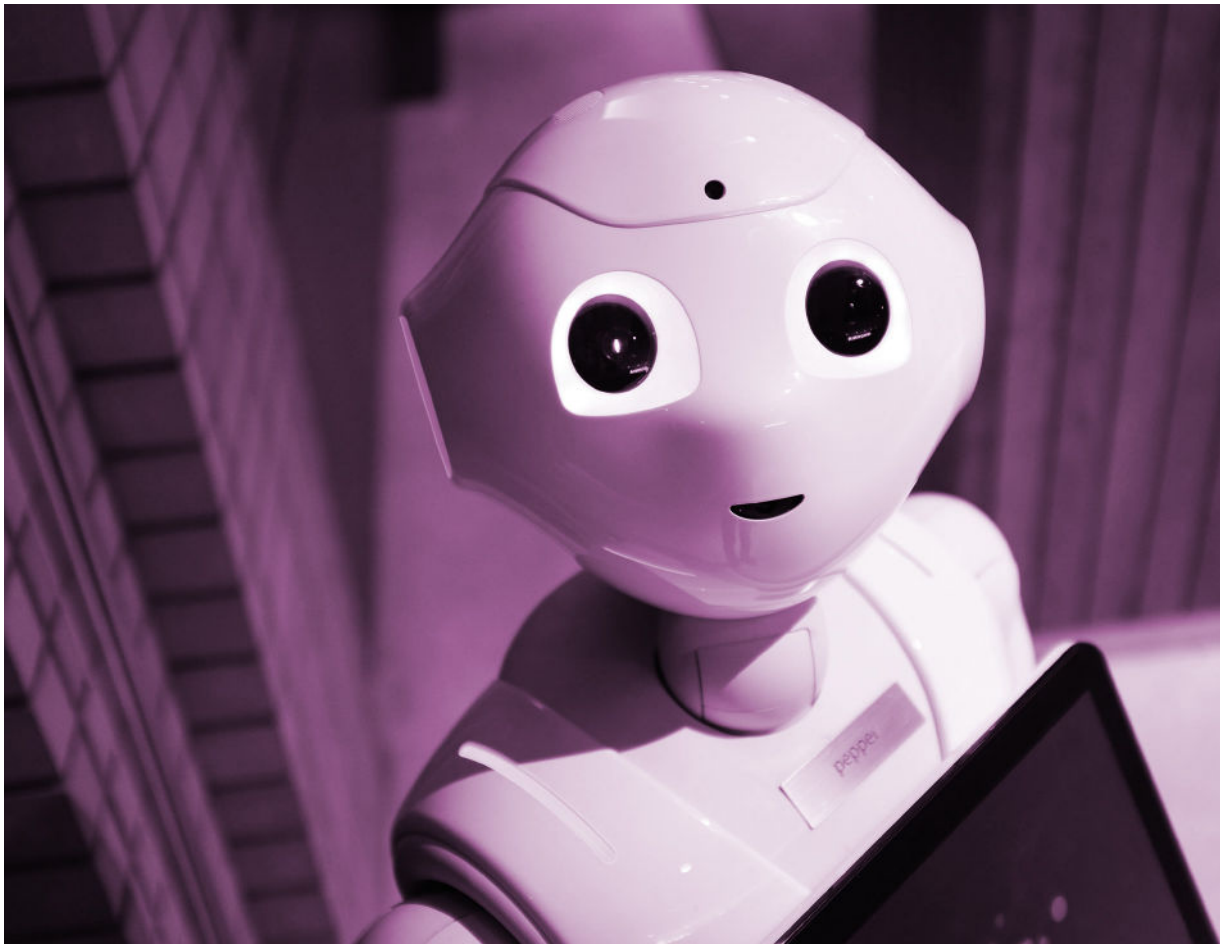


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Introduction

As Artificial intelligence (AI), robotics, data and machine learning enter our workplaces across the world displacing and disrupting workers and jobs, unions must get involved. This document provides unions, shop stewards and workers with a set of concrete demands to the transparency, and application of AI. It will inform AI designers and management of the importance of worker inclusion. There is a definite urgency of now. Action is required to safeguard workers' interests and maintain a healthy balance of power in workplaces. The 10 principles provided in this document are developed by UNI Global Union for this purpose.



AI is present in many household appliances and workplaces: in chatbots, robots, system analytics and databases churning out information and reactions such as movements and speech. It has usefully been defined by Arvind Narayanan, Princeton University, as “When behaviour comes not purely from the programmer, but some other means, e.g. knowledge bases.”

Data is the building blocks of AI; sometimes simple data algorithms, but increasingly also more complex threads of multiple datasets combined into every longer code.

Artificial intelligence is not a new phenomenon. It has been around for 40 or even 50 years. But the rise of digital technologies, and the vast amount of data produced each day by you and me, has given AI a new significance and a whole new dimension: machine learning. Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it to learn for themselves.

Hence, we now have forms of added intelligence that can self-learn. In a never-ending spiraling learning process, what started as data derived from all of us, where humans tell the computer that an image portrays a road sign, a cancer cell, a person or car, the machines – based on previous information – can figure that out themselves. They too can find complex correlations between data sets. One such example is that researchers with AI as a tool have now found the seven conditions that need to be in a person's life, for that person later in life to develop a depression.

AI and The World of Work

AI and its applications are already displacing workers, and with the rapid development in its capabilities, it is expected that many more tasks done by humans today, will be done by AI and robots in the future. Within companies, typical human resource tasks are being complemented or even substituted by AI. This can be seen in the use of AI in recruitment and promotion processes, and in workplace monitoring and efficiency/productivity tests. Precisely because of this, unions must be involved in understanding AI, its potentials and challenges to the world of work, and push to have influence over its application.

“ Artificial intelligence must put people and planet first. This is why ethical AI discussions on a global scale are essential. A global convention on ethical AI that encompasses all is the most viable guarantee for human survival. ”

Some workers are already losing their jobs to AI; indeed, research indicates that over 50% of the work currently done by humans can be faster and more efficiently done by automated systems.

AI, machine learning, robotics and automated systems can also benefit workers. In the healthcare sector, robots will be able to help workers lift patients, or monitor their wellbeing. In many service jobs, AI systems can improve the service offered to customers as ever-growing

databases of information can support the worker in offering the right service and giving the correct information.

For AI and all its applications to be implemented in a sustainable and ethical way, trade unions must call for insights, influence and rights in relation to the management decisions based fully, or partially, on AI. Across the world only a few company agreements currently exist that include these workers' rights.

Experts agree that now is the time to discuss and determine the appropriate use of AI. UNI Global Union has called for a global convention on ethical AI that will help address, and work to prevent, the unintended negative consequences of AI while accentuating its benefits to workers and society. We underline that humans and corporations are the responsible agents.

This document operationalises UNI Global Union's key demand: Artificial intelligence must put people and planet first. This is why ethical AI discussions on a global scale are essential. A global convention on ethical AI that encompasses all is the most viable guarantee for human survival.

The following offers 10 principles and specific points of action, which unions, shop stewards and global alliances must implement in collective agreements, global framework agreements and multinational alliances. Taking this action will ensure workers' rights and influence in the age of digitalisation.

1• Demand That AI Systems Are Transparent

A transparent artificial intelligence system is one in which it is possible to discover how, and why, the system made a decision, or in the case of a robot, acted the way it did.

In particular:

- A-** We stress that open source code is neither necessary nor sufficient for transparency – clarity cannot be obfuscated by complexity.
- B-** For users, transparency is important because it builds trust in, and understanding of, the system, by providing a simple way for the user to understand what the system is doing and why.
- C-** For validation and certification of an AI system, transparency is important because it exposes the system's processes for scrutiny.
- D-** If accidents occur, the AI will need to be transparent and accountable to an accident investigator, so the internal process that led to the accident can be understood.

- E-** Workers must have the right to demand transparency in the decisions and outcomes of AI systems as well as the underlying algorithms (see principle 4 below). This includes the right to appeal decisions made by AI/algorithms, and having it reviewed by a human being.
- F-** Workers must be consulted on AI systems' implementation, development and deployment.
- G-** Following an accident, judges, juries, lawyers, and expert witnesses involved in the trial process require transparency and accountability to inform evidence and decision-making.

The principle of transparency is a prerequisite for ascertaining that the remaining principles are observed.

See Principle 2 below for operational solution.

2• Equip AI Systems With an “Ethical Black Box”

Full transparency in an AI system should be facilitated by the presence of a device that can record information about said system in the form of an “ethical black box” that not only contains relevant data to ensure transparency and accountability of a system, but also includes clear data and information on the ethical considerations built into said system.

Applied to robots, the ethical black box would record all decisions, its bases for decision-making, movements, and sensory data for its robot host. The data provided by the black box could also assist robots in explaining their actions in language human users can understand, fostering better relationships and improving the user experience. The read out of the ethical black box should be uncomplicated and fast.

3• Make AI Serve People and Planet

This includes codes of ethics for the development, application and use of AI so that throughout their entire operational process, AI systems remain compatible and increase the principles of human dignity, integrity, freedom, privacy and cultural and gender diversity, as well as with fundamental human rights.

In addition, AI systems must protect and even improve our planet's ecosystems and biodiversity.

4• Adopt a Human-In-Command Approach

An absolute precondition is that the development of AI must be responsible, safe and useful, where machines maintain the legal status of tools, and legal persons retain control over, and responsibility for, these machines *at all times*.

This entails that AI systems should be designed and operated to comply with existing law, including privacy. Workers should have the right to access, manage and control the data AI systems generate, given said systems' power to analyse and utilize that data (See principle 1 in "Top 10 principles for workers' data privacy and protection"). Workers must also have the 'right of explanation' when AI systems are used in human-resource procedures, such as recruitment, promotion or dismissal.

5• Ensure a Genderless, Unbiased AI

In the design and maintenance of AI, it is vital that the system is controlled for negative or harmful human-bias, and that any bias—be it gender, race, sexual orientation, age, etc.—is identified and is not propagated by the system.

6• Share the Benefits of AI Systems

AI technologies should benefit and empower as many people as possible. The economic prosperity created by AI should be distributed broadly and equally, to benefit all of humanity.

Global as well as national policies aimed at bridging the economic, technological and social digital divide are therefore necessary.

7• Secure a Just Transition and Ensuring Support for Fundamental Freedoms and Rights

As AI systems develop and augmented realities are formed, workers and work tasks will be displaced. To ensure a just transition, as well as sustainable future developments, it is vital that corporate policies are put in place that ensure corporate accountability in relation to this displacement, such as retraining programmes and job change possibilities. Governmental measures to help displaced workers retrain and find new employment are additionally required.

AI systems coupled with the wider transition to the digital economy will require that workers

on all levels and in all occupations have access to social security and to continuous lifelong learning to remain employable. It is the responsibility of states and companies to find solutions that provide all workers, in all forms of work, the right to and access to both.

In addition, in a world where the casualisation or individualisation of work is rising, all workers in all forms of work must have the same, strong social and fundamental rights. All AI systems must include a check and balance on whether its deployment and augmentation go hand in hand with workers' rights as laid out in human right laws, ILO conventions and collective agreements. An algorithm "8798" reflecting the core ILO conventions 87 and 98 that is built into the system could serve that very purpose. Upon failure, the system must be shut down.

8• Establish Global Governance Mechanisms

UNI recommends the establishment of multi-stakeholder Decent Work and Ethical AI governance bodies on global and regional levels. The bodies should include AI designers, manufacturers, owners, developers, researchers, employers, lawyers, CSOs and trade unions. Whistleblowing mechanisms and monitoring procedures to ensure the transition to, and implementation of, ethical AI must be established. The bodies should be granted the competence to recommend compliance processes and procedures.

9• Ban the Attribution of Responsibility to Robots

Robots should be designed and operated as far as is practicable to comply with existing laws, fundamental rights and freedoms, including privacy. This is linked to the question of *legal responsibility*. In line with Bryson et al 2011, UNI Global Union asserts that legal responsibility for a robot should be attributed to a person. Robots are not responsible parties under the law.

10• Ban AI Arms Race

Lethal autonomous weapons, including cyber warfare, should be banned.

Sources:

This document has drawn inspiration and insights from the following key documents:

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