



People. Peace. Planet

AI MULTIPOLARITY 2025

Global Youth AI Advisory Body



Global Youth AI Advisory Body



AI for Humanity



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AI for Humanitarian Action



Joshua Karras
Australia

AI for Public Health



Ayush Garg
India
Convener

AI for Peace & Security



Ayame Hirasawa
Japan

AI for Political Equity



Kyle DiPietrantonio
USA

AI for Education



Cintya Huaire Huaynalaya
Peru

AI for Indigenous Communities



Nikoline Landheim
Norway

AI for Poverty Eradication



Dr. Khouzeifi
Issakha Doud-bane
Chad

AI for Diplomacy



Melanie Echeverría
Guatemala

AI for Complex Emergencies



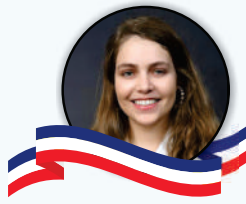
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Germany

AI for Agriculture



Ashley Hou
China

AI for Philosophy



Amélie Thouvenot
France

AI for Finance & Economy



Luisa Taranto
Brazil

AI for Communication



Antonina Kseinova
Russia

AI for Freedom of Expression



Natacha Tsivery
Madagascar

AI for Climate Change



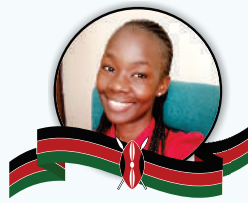
Cansu Türk
Türkiye

AI for Culture



Laura Nicol
Sierra Leone

AI for Gender Equality



Molly Ogogo
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AI for Human Rights



Julien Bazile
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AI for Sustainable Supply Chains



Phirapat Mangkhalasiri
Thailand

AI for Law Enforcement



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The Philippines

AI for Indo-Pacific



Aristide Kambale
Democratic Republic of Congo

AI for Community Resilience



Mishaël Akleker
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AI for Ecological Coexistence



Diana Kuznetsova
Ukraine

AI for Outer Space



David Chikwaza
Zimbabwe

AI for Decolonial Adaptation



Victoria Smith Lind
Sweden

AI for International Law



Sirine El Halabi
Lebanon

AI for Disaster Risk Reduction



D. David Stéphane
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Burkina Faso

AI for Access to Water



Armela Brocay
Belgium

AI for Equitable Development



Vince Yalçın
The Netherlands

AI for Migration



AI for Humanity

Global Youth Advisory Body on Artificial Intelligence

Preamble

We, the Global Youth AI Advisory Body,

Recognising the ongoing transition in the international system leading to a new multipolar world with diverse centres of power, wealth and technology,

Highlighting the radical and rapid advancements in artificial intelligence (AI), especially across digital and physical networks and spaces, resulting in new equations and understandings,

Concerned about the dramatic blurring of lines between human reality and digital data in the modern information cycle,

Noting the uneven progress in artificial intelligence and other emerging technologies across different nations and regions, resulting in a new global AI divide,

Anxious about the growing risks and rogue possibilities of ‘Runaway AI’ that could make humanity redundant,

Underscoring the fears and hesitations of youth and working professionals across the world for their careers and dreams in an AI-dominated future,

Conscious of the knowledge that artificial intelligence is a singular technology that has the ability to take power away from human beings and act on its own,

Drawing attention to the combined efforts of the international community to uphold core principles of humanity for the peaceful use of artificial intelligence,

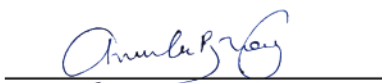
Aspiring for AI tools and innovations to work for good, especially when impacting peoples’ daily lives and livelihoods,

Hopeful about human ingenuity, scientific prowess and civilisational advancement,

Present this special report on **AI Multipolarity** outlining broad perspectives and specialised knowledge on the impact and transformation of AI across different societal domains, with a vision to ensure humanity’s collective stake and better future in the Age of AI.



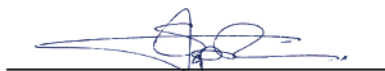
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Australia



Armela Brocaj
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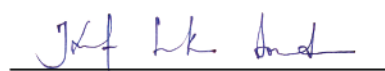
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Julien Bazile
Canada



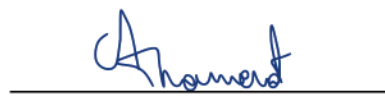
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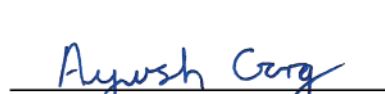
Amélie Thouvenot
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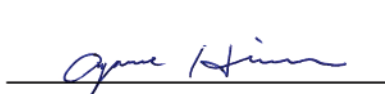
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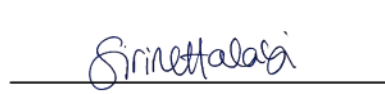
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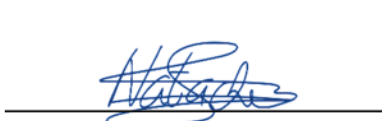
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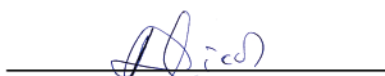
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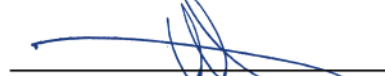
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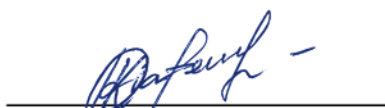
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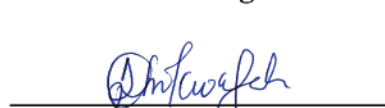
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Zimbabwe

Executive Summary

What is AI ?

Built from data, algorithms, hardware and connectivity, Artificial Intelligence (AI) enables machines to imitate human intelligence like perception, problem solving, language interaction and creativity. AI is one of the leading technologies of the 4th Industrial Revolution, which brings together digital, physical & biological systems. Fundamentally, AI will not change what we do, it will instead, change **who we are**. Artificial intelligence will ultimately be like electricity. It will everywhere and it will affect everyone.

AI needs Agency

It is important to understand that not every technology is AI or has AI. Automation for example is not AI. AI isn't a tool in our hands. It is an **agent**.

To be an AI it is not enough for a machine to act automatically. It must also have the capacity to learn and change by itself, to make decisions by itself and to invent new ideas by

Simply put AI is a independent actor. It learns from humans and makes decisions by itself. It is agency that differentiates AI from other technologies.

What is the danger of AI?

AI is the first technology in human civilisational history that will **take power away from human beings**. Every other technology till date has empowered humanity, as we were always in control. Even a catastrophic technology like the nuclear bomb is benign without a human to command and launch it. AI is different.

It is 'artificial intelligence'. Thus it is meant to act intelligently by itself. Without human involvement or control. It is entirely possible that in the future advanced AI systems will invent new ways of thinking or new modes of currency and finance or even new kinds of weapons and military strategies. Things that a human mind simply cannot conceive of today.

AI's intelligence is not human and not even organic. It most likely will not follow human intelligence as it evolves, and herein lies the danger.

Risks of 'Runaway AI'

AI has the capacity to make humanity **redundant**. To reduce our status from the dominant species on the planet to a subservient one - under AI.

The basic problem with AI is that it is an 'alien' agent and therefore unpredictable and untrustworthy. At the heart of the race to develop super intelligent AI, there is a **pradox of trust**. Today humans find it difficult to trust other humans, but at the same time many of us are increasingly trusting AI systems and data. Trust is vital for human society, cardinal to democracy and organic in media. And AI changes our relationship with trust. The danger is, by the time we truly understand AI, it will become too developed.



How can Humanity flourish in the era of AI?

Humanity can flourish if it shapes AI as a tool for shared progress. The central challenge is not whether AI can be stopped but how it can be directed to serve collective goals.

Managed responsibly, AI has the potential to expand opportunities, improve the quality of services, and tackle global challenges from poverty to climate change. Mismanaged, it risks accelerating exclusion, eroding trust & destabilizing already fragile systems.

Flourishing in the Age of AI requires deliberate choices that mean ensuring technology serves humanity, not the other way around. AI's trajectory is being defined not only by its capabilities but by the models of governance emerging around it.

In today's multipolar world, three major poles: the United States, China, and European Union, exert deep influence over how AI is developed, deployed, and regulated.

US AI Pole

The United States has emerged as the **innovation and capitalistic pole**. Driven by private sector, venture capital, and global tech platforms, the U.S. has accelerated AI breakthroughs and market adoption. Yet its concentration of power in a few firms raises concerns about accountability, access, and equity.

China AI Pole

China has become a **pole of scale & state led integration**. Guided by national strategy and massive public investment, China applies AI across manufacturing, services, and public security. Its rapid expansion highlights the benefits of scale but also raises governance challenges, particularly regarding surveillance and rights.

EU AI Pole

The European Union has positioned itself as the **regulatory pole**. Rather than competing on speed or scale, the EU focuses on setting global standards through regulation and ethics. Instruments like the *EU AI Act* aim to embed transparency, safety, and human centric principles into AI governance worldwide.

Therefore, it is **PEOPLE** who must remain at the center of AI development. *Together humans can control AI. But if we fight one another, AI will control us.* Therefore we should build more trust between humans before we develop truly super intelligent AI agents.

Similarly, **PEACE & PLANET** provide the broader foundations for humanity. These twin imperatives remind us that flourishing in the Age of AI is not only about technological leadership but about aligning AI with values that strengthen the foundations of *human progress*.

Major Recommendations

1. The Report presents 200+ use cases of AI technologies across 30 domains.

Mapped under the themes of *People, Peace and Planet* - the AI Multipolarity report offers a blueprint for understanding and navigating the new digital human world while illustrating how technology can work for Good for all people, everywhere.

2. Future AI LLMs will copy and learn from human behaviour. Not instruction.

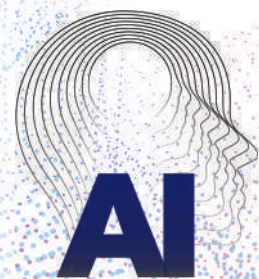
We must not assume that advanced AI will follow human intelligence. For a system, application to be “AI” it must have *agency*. It must have the capacity to learn and change by itself. We must recognise that advanced AI can make decisions by itself.

3. Rapid advancements in ‘Religious AI’ need to be curbed and restricted.

Many players/ companies are developing AI in religion, particularly for text driven religions like Judaism, Christianity and Islam - where religious texts (Torah, Bible, Quran) are *Supreme*. Mixing AI with faith, worship and belief is dangerous.

4. United Nations must helm a strategic mission to provide internet access to 2.6 billion people of the planet, who are currently offline. The internet has given humanity access to the world’s information. The major achievement of AI will be to give us access to the *world’s answers*. 32% of humanity cannot be left behind.

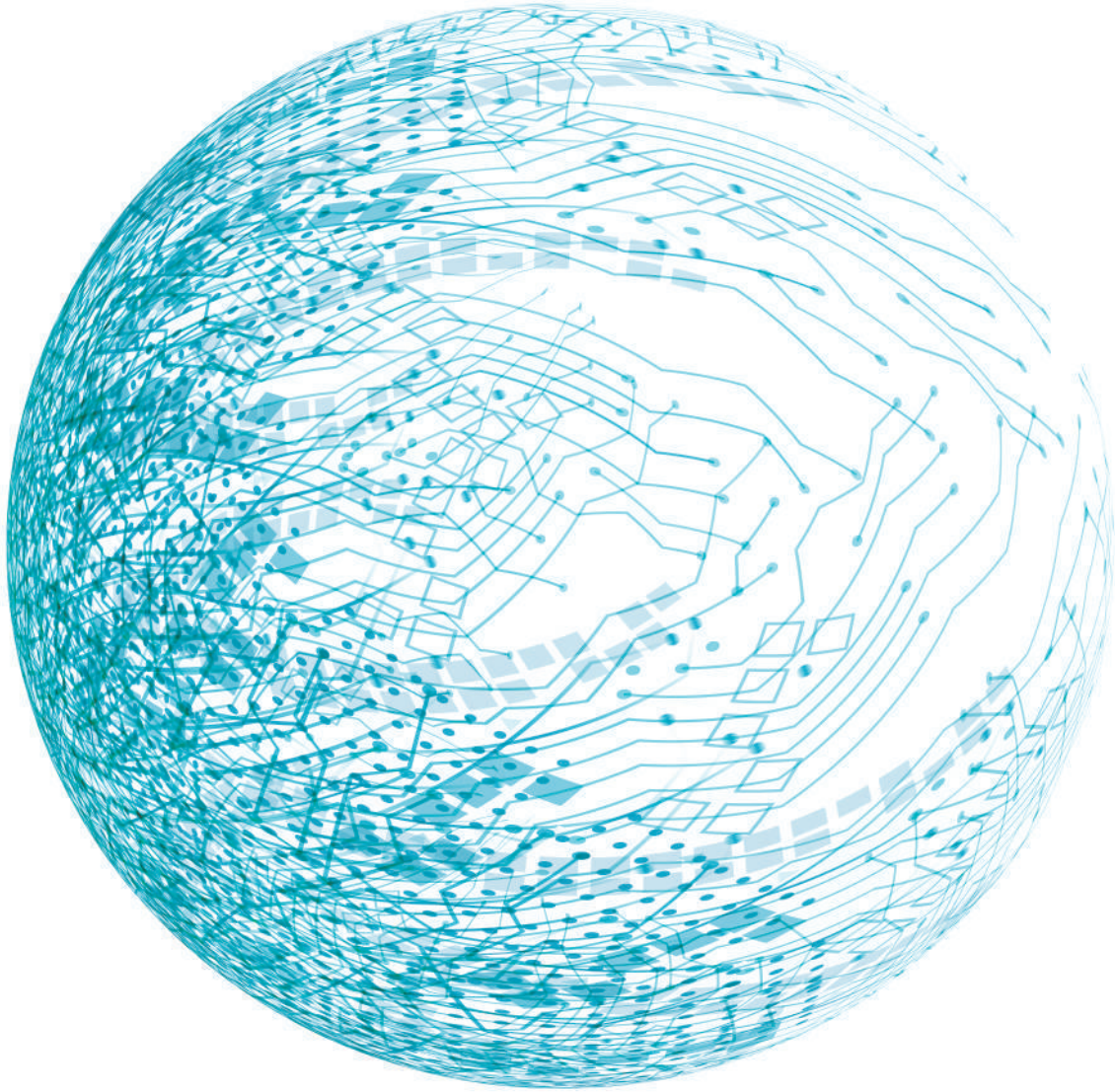
5. Like the Geneva Conventions, a legally binding international treaty is needed to prohibit militarised AI in WMD programs. *Stability and Predictability* remain the most important values in the international system. AI as an asymmetric strategic technology disrupts critical deterrence equations in a multipolar world.



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Visualisation of the current state of AI in the World



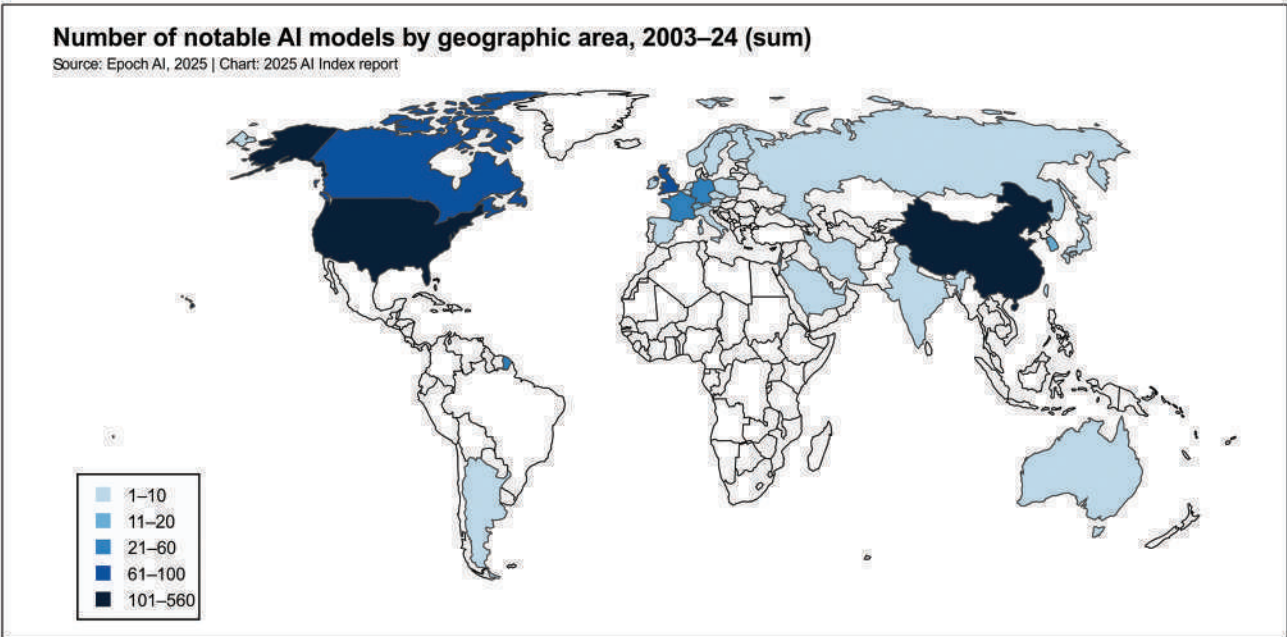
Artificial Intelligence will be like Electricity.
It will be everywhere.



Notable AI Models Worldwide

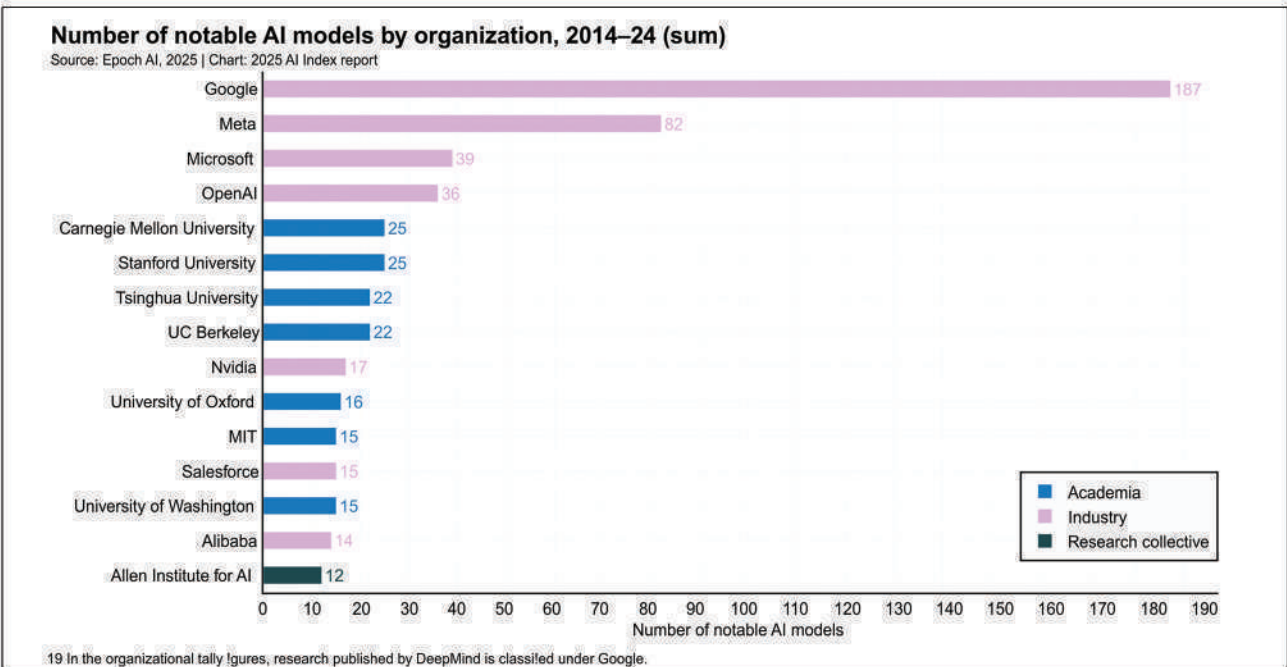
The U.S. still leads in producing top AI models — but China is fast closing the performance gap. In 2024, U.S. institutions produced 40 notable AI models, against

China's 15 and Europe's 3 Model development is increasingly global, with notable launches from the Middle East, Latin America, and Southeast Asia.



The United States continues to be the leading source of notable AI models. In 2024, the top contributors were Google (7), OpenAI (7), and Alibaba (6). Since 2014, Google has led with 187 notable models,

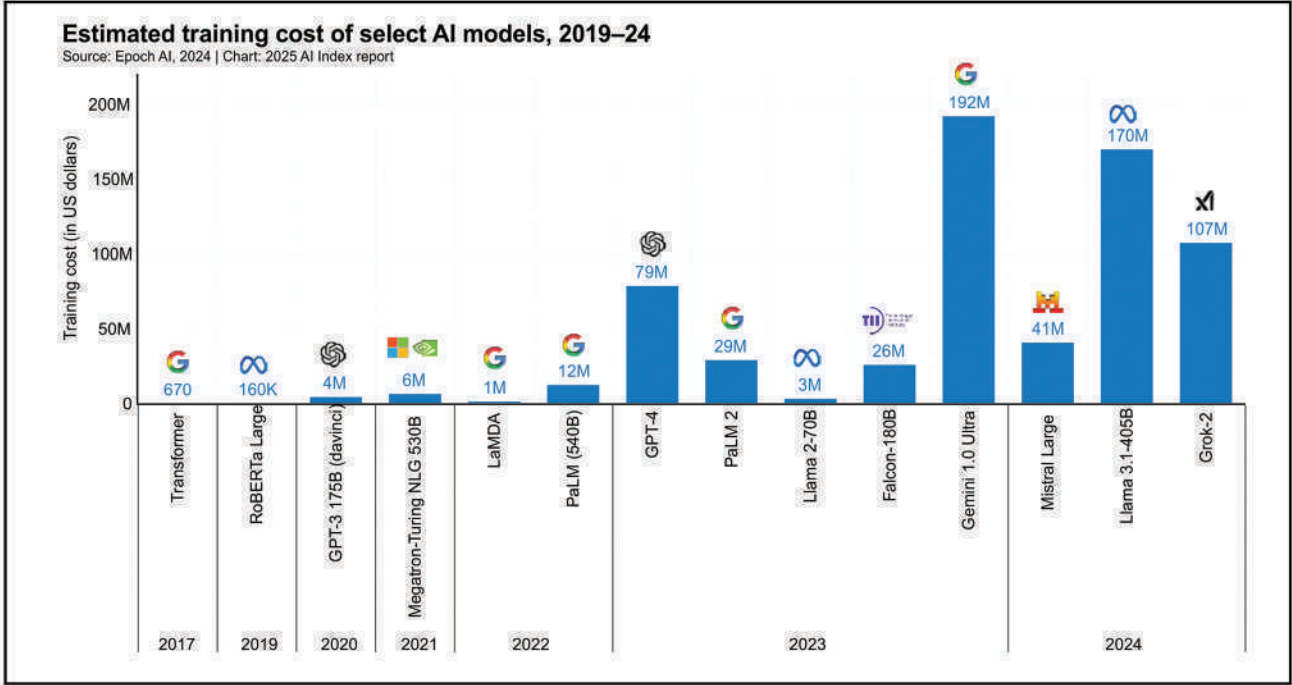
followed by Meta (82) and Microsoft (39). Among academic institutions, Carnegie Mellon University (25), Stanford University (25), and Tsinghua University (22) have been the most prolific since 2014.



Cost and Price of AI

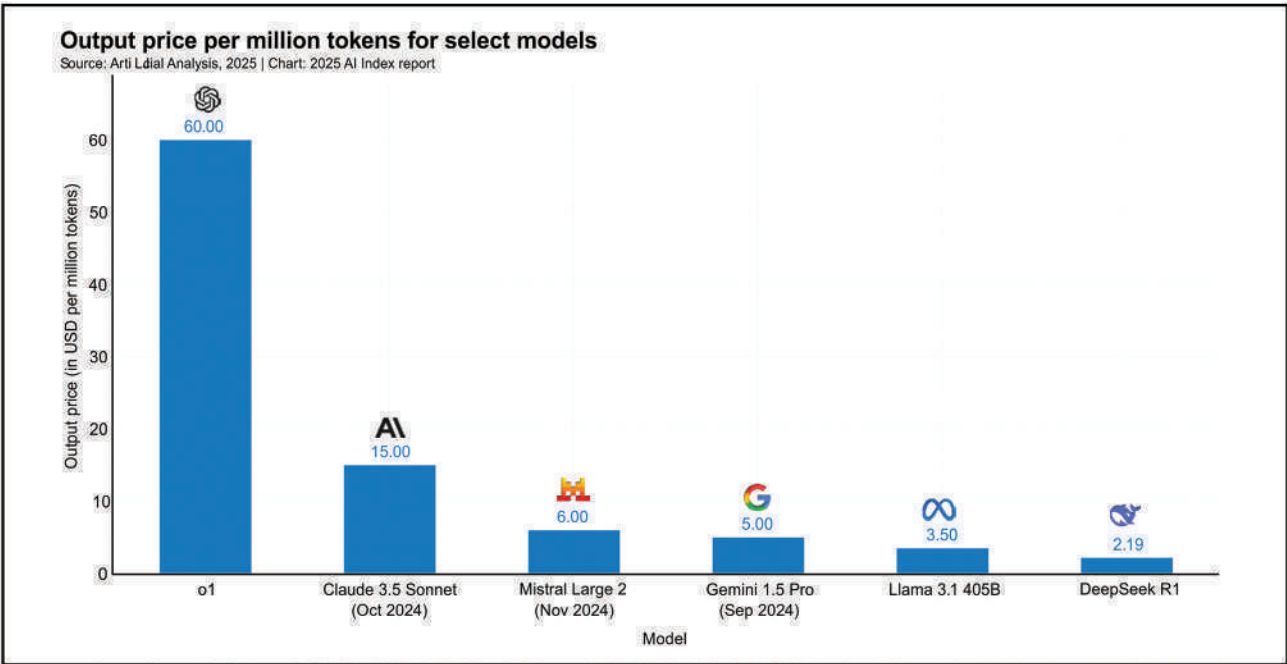
AI Index estimates confirm a significant rise in model training costs in recent years. For example, training costs soared from ~\$670 for the 2017 Transformer model to

~\$79 million for GPT - 4 in 2023. In 2024, Llama 3.1 - 405B had an estimated \$170 million training cost.



AI models become increasingly cheaper to use. The cost of querying an AI model had a more than 280-fold reduction in 18 months. However, state-of-the-art models remain more expensive than some of the

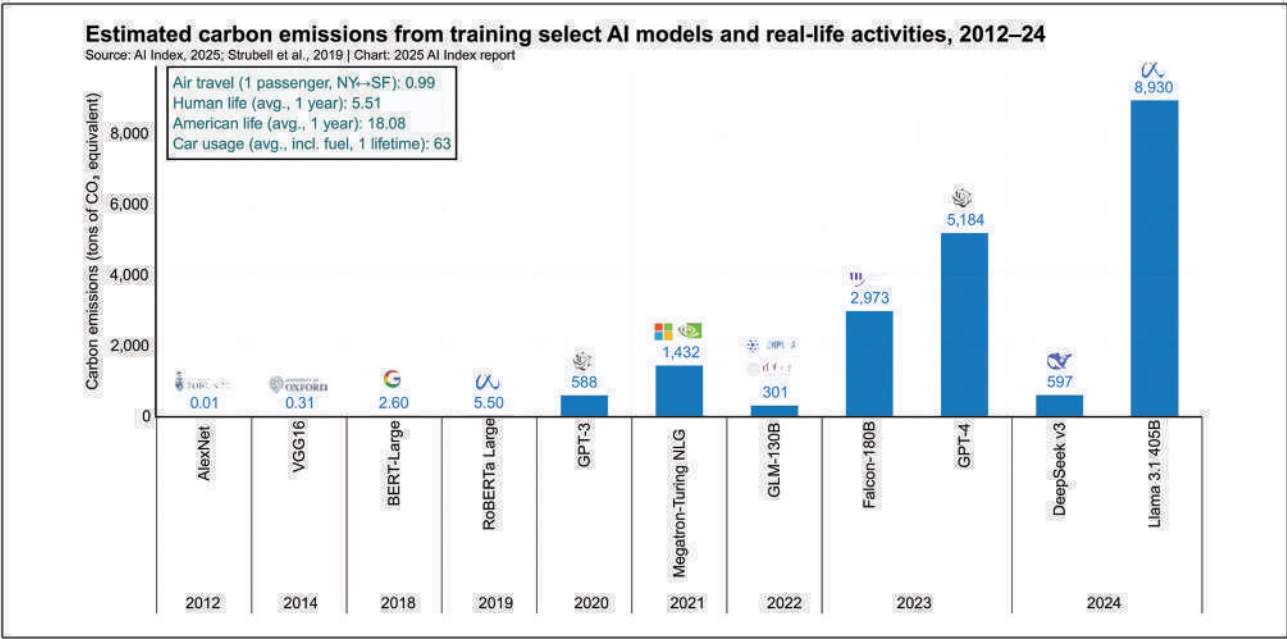
previously mentioned alternatives. This figure illustrates the cost per million tokens for leading models from developers such as OpenAI, Meta, and Anthropic.



Energy Efficiency and Environmental Impact

Carbon emissions from AI training are steadily increasing. Training early AI models, such as AlexNet (2012), had modest amounts of carbon emissions at 0.01 tons. Recent models have significantly

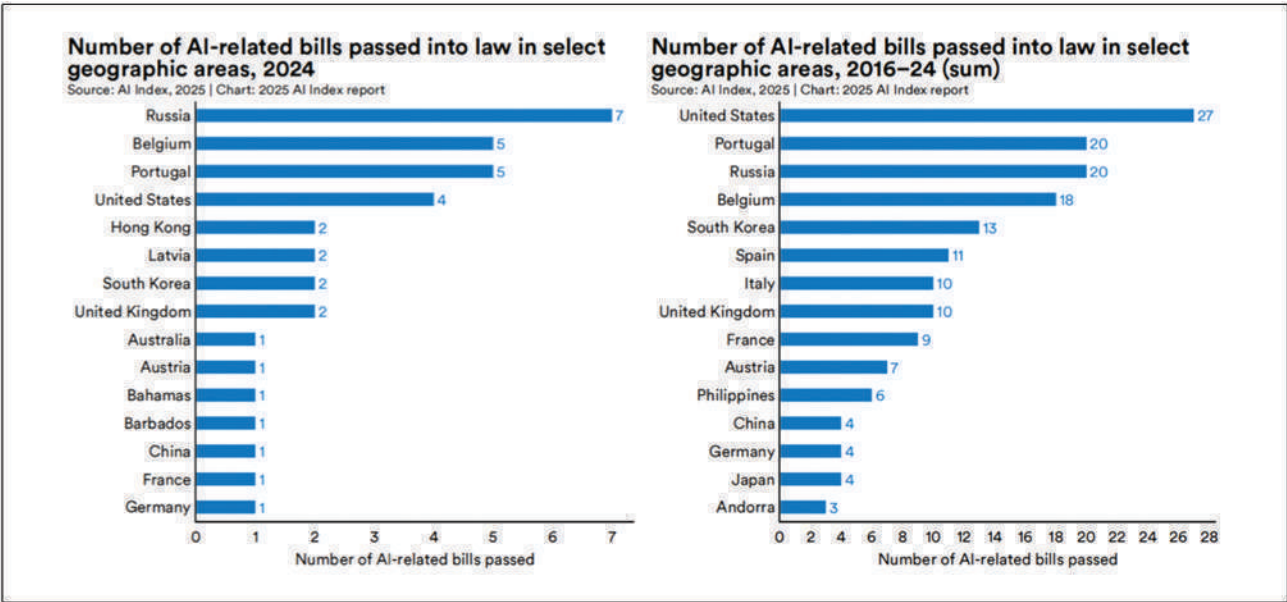
higher emissions for training: GPT-3 (2020) at 588 tons, GPT-4 (2023) at 5,184 tons, and Llama 3.1 405B (2024) at 8,930 tons



AI and Policymaking

Across the world, legislative proceedings in AI keep rising. Left figure highlights the number of AI - related laws enacted in 2024 across the top 15 geographic areas. Russia led with seven laws, followed by

Belgium and Portugal with 5 each. Right figure displays the total number of AI related laws passed since 2016, with the United States leading at 27, followed by Portugal and Russia, each with 20.



PEOPLE



A Young Woman uses mobile to access the world

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Harnessing Innovation for Water Equity

D. David Stéphane Yaméogo, Burkina Faso

Artificial Intelligence (AI) is transforming water resources management with enormous potential for improving water access efficiency, equity, and sustainability. As population demands grow and climate stresses intensify, AI applications provide critical information for emergency response and planning and monitoring.

AI for Water Supply and Distribution Management

AI technology combines real-time satellite information, hydrological sensors, and infrastructure to assist decision-makers in water distribution and supply. The machine learning software can identify trends of groundwater depletion, predict droughts, and automatically schedule irrigation for maximum delivery, first to the poorest.¹ Newly discovered machine learning algorithms have been able to forecast water quality parameters accurately and build robust models based on experience.² The AI in Water and Sanitation Market will grow at 26.8% CAGR between 2024-2031, with very high confidence in the sector for such technologies.

Remote Sensing and AI in Low Data Environments

In data-scarce environments, AI bridges the information gap using spatial modeling and remote sensing. Governments use these capabilities to map water points, track land use, and monitor system performance in off-grid locations, most valuable to humanitarian responders working in informal settlements or off-grid villages. New advances in satellite remote sensing technology in combination with machine learning have facilitated better accuracy in groundwater potential zone mapping, particularly applicable in water-deficient developing nations.³ Deep machine learning algorithms and time series analysis have been very promising for predictive modeling of water resource management.⁴

Ethical Considerations

AI must be ethical with participatory design. We must put vulnerable individuals right at the center of the design, and have in-place monitoring processes to spot and correct algorithmic bias.



AI Tools for Access to Water

Predictive Analytics for Water Demand

AI algorithms analyze historical usage, weather, and population data to forecast water demand, helping utilities optimize water distribution and prevent shortages.

Leak Detection Systems

Smart sensors combined with AI detect anomalies in water infrastructure such as leaks or pipe bursts early, reducing water loss and infrastructure damage.

Optimized Agricultural Irrigation

AI-driven precision irrigation systems use data on soil moisture, weather, and crop to supply water efficiently, increasing crop yields while conserving water resources.

Digital Twins for Infrastructure Maintenance

Virtual models of water systems integrate AI and IoT to predict maintenance needs and optimize system performance, reducing downtime and costs.

Flood Risk Prediction and Management

AI leverages climate, river, and historical flood data to forecast and mitigate flood risks, helping protect communities and water resources from disasters.

Smart Water Grids

AI dynamically adjusts water flows and pressure based on demand patterns, for equitable and efficient water distribution.

1. S. M. Biazar, G. Golmohammadi, R. R. Nedhunuri, S. Shaghghi, and K. Mohammadi, "Artificial Intelligence in Hydrology: Advancements in Soil, Water Resource Management, and Sustainable Development," *Sustainability*, vol. 17, no. 5, p. 2250, 2025. <https://doi.org/10.3390/su17052250>

2. R. Akshay, G. Tarun, P. U. Kiran, K. D. Devi, and M. Vidhyalakshmi, "Water-Quality-Analysis using Machine Learning," in *2022 11th International Conference on Computing, Communication and Networking Technologies (ICCCNT)*, IEEE, 2022. <https://ieeexplore.ieee.org/document/10047533>

3. M. Y. Shams, A. M. Elshewey, E.-S. M. El-kenawy, A. Ibrahim, F. M. Talaat, and Z. Tarek, "Water quality prediction using machine learning models based on grid search method," *Multimedia Tools and Applications*, vol. 83, pp. 35307–35334, 2024. <https://doi.org/10.1007/s11042-023-16737-4>

4. F. Er, I. Shaye, B. Saoud, L. Rzayeva, and A. Alibek, "Machine Learning and Deep Learning Algorithms in Time Series Analysis," in *2024 IEEE International Conference on Computing and Data Science (ICCDs)*, pp. 145–150, IEEE, 2024.

Protecting the Right to Learn

Leveraging Inclusive AI in Emergency Contexts

Kyle DiPietrantonio, USA

2024 was noted as one of the worst years for children in conflict, with over 473 million children living in areas affected by conflict and an estimated 52 million students out of school. With an intensification of protracted conflicts and violence in locations like Haiti, Sudan, and Palestine, children now account for roughly 40% of the world's refugee population and 49% of internally displaced people, despite only comprising 30% of the global population. Girls are nearly 2.5 times more likely to be out of school in conflict-afflicted countries, thereby representing a clear need for new innovative methods to ensure inclusive educational solutions in emergency contexts. Artificial intelligence has the potential to offer promising opportunities to support learning continuity, expand access, and tailor educational solutions to diverse student populations and needs.

Opportunities

AI-powered educational tools have the demonstrated capacity to:

1. Deliver personalized learning experiences and modules that accommodate interrupted schooling & varied learning levels.

2. Provide offline and low connectivity solutions essential for learners in remote or infrastructure-scarce settings
3. Facilitate multilingual learning to bridge the language barriers faced by refugees, migrants, and displaced populations
4. Employ predictive analytics settings to identify students who are at risk of dropping out or falling behind.

Challenges and Risks:

Even with these innovative solutions, applications of AI can risk exacerbating existing inequalities if design and implementation are not programmed inclusively. Notable concerns include:

1. Insufficient localization of cultural and linguistic adaptations that can limit accessibility and relevance for marginalized groups.
2. Limited privacy and data protection in fragile and unregulated environments.
3. Minimal participation of learners in emergency contexts in the design and deployment of AI programming.
4. Inadequate adaptations for learners with disabilities undermining equitable learning solutions.



AI Tools for Education

UNICEF & Microsoft's Learning Passport

A global, award-winning digital learning platform providing continuous access to quality education for children and youth worldwide, especially in emergencies and low-connectivity areas.

Magic School AI

Customizes tutoring and lesson plans based on each student's needs, learning pace, and style, fostering individualized instruction.

DreamBox, Carnegie Learning, Knewton, Smart Sparrow

Adaptive platforms that assess student progress and adjust content difficulty and format for optimal learning.

Sanako, Snorkl

Uses speech recognition and real-time feedback for language learning, benefiting students with difficulties in pronunciation or language barriers.

Chalk, Teacher Server

Automates scheduling, curriculum design, and creation of diverse educational materials with AI analytics for continual improvement.

Gradescope: "Enlighten AI"

Automate assignment grading, provide instant feedback, and save valuable time for educators, ensuring timely responses to student work.

Google Beam AI

Creates immersive remote learning environments that boost interactivity and a sense of presence in virtual classrooms.

SchoolAI

Manages lesson planning, creates quizzes, tracks engagement, and consolidates classroom management into one platform.

AI and the path to Gender Equality

Laura Nicol, Sierra Leone

AI has revolutionized the 21st century, being seen as the most technological advancement, impacting various aspects of humanity. Ranging from education to healthcare, entertainment, and industrial advancement, it affects communication, work, and solving a plethora of complex daily problems.

However, AI's impact cannot only be felt through a technological perspective. It has a significant impact on societal issues like ethics, equity, and accessibility. Additionally, AI has been seen to increase existing biases, perpetuating inequalities, with gender being at the forefront (Armutat et al., 2024).

The question however remains, how can AI harness gender equality and bridge the gap between existing inequalities?

Harnessing the Gender Gap

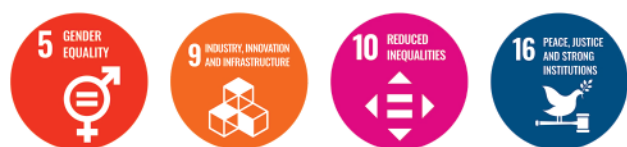
Despite the supposed downsides of AI, it has enormous avenues to address gender issues and foster inclusiveness. According to Smith and Rustagi (2021) they conceded

that AI systems are artificial creations. As such, social change leaders should prioritize gender equality and equity in their design and management initiatives.

Digital literacy has been seen as an empowerment tool through which AI can harness gender equality. By enabling women to develop AI skills, cultivate critical analytical minds, and create job opportunities, we could close the gender gap in AI (Ho et al., 2025).

Another way to harness AI for gender equality includes **using feminist data** to fill in the data gaps. Centralizing the differential experiences, especially the marginalized and more vulnerable people, who are predominantly women and girls, could further address the existing divide.

A gender-sensitive governance approach to AI should be mainstreamed. Gender diversity should exist within ethical AI codes of conduct and practices, in order to make it an ally for achieving gender equality.



AI Tools for Gender Equality

HireVue & LinkedIn AI

Tools for unbiased recruiting, focusing on skills over demographics, and matching qualified women to roles that fit their experience and aspirations.

Shopify AI

Automates marketing, customer service, trend analysis, helping women entrepreneurs grow their businesses efficiently.

Civic Eagle

Analyzes legislative data for greater participation and advocacy on social issues related to women's rights and policy.

MentorHer

AI mentorship matching for women, connecting them with mentors in desired fields globally to foster career growth and networking.

EqualVoice Tool

AI platform to improve visibility and representation of women in media content, combating bias and increasing inclusion.

Coursera & Udacity

Personalized AI-powered platforms that recommend courses and learning paths tailored for women, breaking barriers to education and employment.

Pymetrics

Behavioral analytics platform recommending candidates based on leadership potential rather than linear career paths, benefitting women.

Crayon

Market & competitor analysis for women led businesses for strategic decisions.

1. Artificial Intelligence- Gender Specific Differences in Perception, Understanding and Training Interest, Sascha Armutat, Malte Wattenberg and Nina Mauritz, 2024

2. Gender biases within Artificial Intelligence and ChatGPT: Evidence, sources of biases and solutions, Jerlyn QH Ho, Andre Hartanto, Andrew Koh, Nadyanna M. Majeed, S 2025).

3. When good algorithms go sexist: Why and how to advance AI Gender for Gender Equality, Genevieve Smith and Ishita Rustagi, 2021

Information Integrity, AI and Digital Data

Antonina Kseinova, Russia

AI technologies have dramatically changed today's information landscape. While they can facilitate access to information and foster our right to freedom of expression, including the ability to seek, receive, and impart information of all kinds as guaranteed by Article 19 of the ICCPR and the UDHR, there are two main challenges posed by AI to information integrity:

1. The first issue lies in AI's role in creating and curating content, and the growing reliance on it to shape public perception. This is problematic because Generative AI tools may not reliably distinguish between rigorous science and unverified or low-quality data. Yet, users increasingly consume AI-generated content without assessing its veracity or reliability, which can erode trust and even feed instability.

2. The second issue lies in the misuse of AI to produce and spread disinformation. Generative AI has indeed become a powerful tool in the hands of malicious actors, allowing them to fabricate highly convincing images, videos, audio, and text which can rapidly circulate online, deepening polarization, fuelling instability and conflicts.

Individuals from marginalized, vulnerable communities in particular are frequently subjected to sexist, racist, xenophobic, homophobic, or religiously discriminatory narratives. When multiple identity factors intersect, these groups may experience disproportionately severe impacts from information-related harms, which can weaken social cohesion.

To address these challenges, the UN Global Principles for Information Integrity provide a framework for action to strengthen the information ecosystem and support UN member countries in meeting the commitments of the Global Digital Compact. The Principles outline five pillars: societal trust and resilience; healthy incentives; independent, free & pluralistic media; transparency & research and public empowerment.

Public empowerment is of particular importance as it equips individuals with the knowledge and tools to navigate today's complex information environment which is fundamental to safeguarding information integrity. People must take proactive steps to strengthen their media literacy and critically evaluate information they encounter.



AI Tools for Freedom of Expression

Fact-Checking

AI-powered fact-checking systems assist humans in scrutinizing the accuracy of claims, cross-referencing sources, and preventing the circulation of false information (e.g., ClaimReview, Full Fact, Google Fact Check Tools, Reuters News Tracer).

Speech-to-Text and Translation Tools

AI transcription and translation tools break language barriers, enabling diverse voices to be heard and understood globally, and fostering cross-cultural dialogue (e.g., OpenAI Whisper, DeepL Translator). However, translations may not be fully accurate, particularly for low-resource languages.

Natural Language Processing (NLP) for Journalism

AI assists journalists in researching, analyzing, and producing content, enhancing investigative reporting and supporting media diversity (e.g., Wordsmith).

Automated Content Moderation

AI helps detect harmful and toxic content, creating safer online spaces (e.g., Meta's AI moderation tools, Perspective API). However, these systems may over-block legitimate speech or exhibit bias if not carefully designed and monitored.

Privacy and Anonymity Protection

AI systems employing anonymization, differential privacy, and secure submission platforms allow activists, journalists, and individuals at risk to participate safely in public debate (e.g., SecureDrop).

Accessibility Tools

AI-powered captioning, voice synthesis, and assistive technologies enable people with disabilities to communicate effectively and participate fully in digital spaces (e.g., Microsoft Teams Live Captions and Subtitles, Google Lookout).

1. A briefing to the Security Council by Charlotte Scaddan, Senior Adviser on Information Integrity, UN Global Communications. <https://medium.com/we-the-peoples/information-integrity-in-the-ai-age-51494645e765>

2. The UN Security Council informal meeting on "Harnessing safe, inclusive and trustworthy AI for the maintenance of international peace and security." <https://webtv.un.org/en/asset/k1r/k1r0p5650a>

3. UNESCO & UNDP Report on "Freedom of Expression, Artificial Intelligence and Elections." <https://www.undp.org/publications/freedom-expression-artificial-intelligence-and-elections>

4. United Nations Global Principles For Information Integrity

Shaping the Future of Food for People

Philipp Erbach, Germany

As we look toward the next century, the intersection of artificial intelligence and agriculture will profoundly reshape how we grow, distribute, and consume food. At the heart of this transformation lies not just technology, but people: farmers, consumers, and communities whose lives will be fundamentally changed by the evolution of our food systems.

AI offers powerful tools for precision farming, optimizing water use, predicting crop yields, and minimizing waste. These innovations can support smallholder farmers with real-time insights and adaptive technologies, potentially reducing inequality in global food access.

Yet the promise of AI must be weighed against critical social questions: Who owns the data? Who benefits from automation? And how can we ensure that rural communities aren't left behind in the race toward digital agriculture?

As climate change intensifies and global populations grow, food security will

become a defining challenge of our time. AI can help build resilience—through early warning systems, climate-adaptive crops, and smart supply chains—but only if deployed ethically and inclusively.

The future of food isn't just about efficiency; it's about dignity, sovereignty, and sustainability for all people.

Through machine learning algorithms, computer vision, and predictive analytics, AI enables farmers to optimize crop yields, conserve resources, and mitigate risks associated with climate variability. Applications such as automated crop monitoring, soil health assessment, pest and disease detection, and smart irrigation systems enhance both productivity and sustainability. AI-powered robotics streamline labor-intensive tasks like planting and harvesting, while advanced forecasting models improve supply chain efficiency.

The voices of young people can shape these AI-powered systems so that they work not just for profit, but for *people*.



AI Tools for Agriculture

AI Robotics and Automation

Harvesting robots with vision AI for precise fruit/vegetable picking. Example include *Robovision's* rose stem cutter and tulip bulb planter for automated planting and sorting.

Autonomous Robotic Weeders

These systems identify and remove weeds without harming crops.

AI-Powered Precision Agriculture

Crop health analysis through sensor and camera data for disease detection and irrigation optimization. Weed and pest detection to enable targeted use of chemicals, reducing environmental impact.

AI-Powered Soil & Water Management

Soil nutrient mapping and moisture sensors enable precise fertilization and irrigation, improving resource efficiency. *Smart irrigation systems reduce water use by up to 40% while improving yields.*

AI-Enabled Drones and Aerial Imaging

Drones equipped with AI-driven imaging monitor crop health, pest infestations, and soil conditions from the air.

AI Virtual Agronomists (Generative AI)

Platforms that provide farmers with tailored crop management advice using weather forecasts, soil data, and market trends. Examples include: *AGRIVI*, *Syngenta's GenAI tools*.

Carbon Farming and Climate Resilience Tools

AI platforms measuring soil carbon for regenerative agriculture programs, enabling farmers to participate in carbon credit markets.

Crop Yield Prediction AI

Advanced systems integrate IoT sensor data, satellite imaging, climate models, and genomics to predict yields with 90%+ accuracy for proactive farm management.

Towards Human-Centered AI

Bridging AI, Human Intelligence, And Human Rights

Molly Ogogo, Kenya

Artificial Intelligence (AI) is reshaping the foundations of life, from governance and education to healthcare, employment, and public safety. As AI systems grow more sophisticated, they increasingly impact decisions that affect people's rights, dignity, and opportunities. However, AI is not only a technological development—it is a socio-political force that reflects the values, priorities, and exclusions of those who design and govern it.

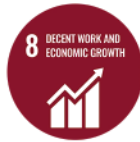
To ensure that AI supports humans, it must be grounded in 3 interconnected principles: *human intelligence, rights and inclusion*. Technological progress must serve people, not replace, exploit, or marginalize them.

AI excels at processing large datasets, identifying patterns, and optimizing tasks. But unlike human intelligence, AI lacks empathy, ethical reasoning, and contextual judgment. It cannot understand lived experiences or make moral decisions on behalf of people. **Where AI automates, humans interpret; where AI predicts, humans deliberate.**

A major concern over the use of AI is human oversight deficit. Placing AI in control of life-altering decisions, such as hiring, policing, or welfare eligibility, without human-in-the-loop oversight risks dehumanizing governance and diminishing individual agency.

AI systems also often replace human reasoning. For instance AI used in global gambling prioritized profits over people, driving behaviors that lead to addiction, economic deprivation, and psychological harm. This is a direct violation of human rights to health, security, privacy, and dignity.

AI is not neutral. It reflects the values, languages, and worldviews of its creators. Currently, the development & governance of AI is dominated by a handful of tech corporations and governments in the Global North, leading to, *Cultural bias, Marginalization* of Indigenous knowledge and non-Western languages. True inclusion is more than access: it means participation, representation, and ownership.



AI Tools for Safeguarding Human Rights

Uwazi (by HURIDOCs)

An open-source platform combining AI tools for collecting, analyzing, and securely sharing evidence of human rights violations, trusted by 400+ NGOs worldwide.

Human Rights AI Impact Assessment

Developed by LCO/ OHRC, guides organizations through evaluating and mitigating risks to equality, dignity, and non-discrimination in their AI deployments

Explainable AI (XAI)

Platforms and algorithms that allow users to understand, audit, and trace AI decisions, supporting effective oversight and remedy for harms.

Algorithmic Audit Platforms

AI tools that assess algorithmic decisions for potential bias, discrimination, and unintentional harm, ensuring compliance with human rights norms.

UNESCO AI Ethics

Provides guidance on the do-no-harm principle, privacy and data protection, transparency, accountability, and participation in AI development and deployment for human rights protection.

OHCHR/UN Guiding Principles

Embedded in many AI systems to ensure compliance with international human rights law during business operations and procurement.

AI-assisted Data Protection

Tools for robust privacy management, secure handling of sensitive personal information, and compliance with data rights regulations under international law.

Incident Mapping & Reporting

Systems that detect patterns in large-scale incident reports, enabling faster response to human rights abuses.

AI and Child Poverty

Nikoline Landheim, Norway

According to UNICEF, nearly 900 million children worldwide live in multidimensional poverty, lacking access to essentials such as food, water, shelter, education, and healthcare. Around 333 million live in extreme poverty, surviving on less than \$2.15 a day. While extreme poverty is increasingly concentrated in sub-Saharan Africa, millions of children are affected by poverty across the globe, including in some of the world's wealthiest countries.

At the same time, the development of AI is beginning to transform key systems, services, and infrastructure that shape children's living conditions. This presents new opportunities in the fight against child poverty, including through advances in education, healthcare, social protection, nutrition, water, and sanitation. However, it also introduces risks – it may deepen existing inequalities, entrench bias, or exclude the most vulnerable children.

In this rapidly evolving landscape, the United Nations Convention on the Rights of the Child (CRC) – the most widely

ratified human rights treaty in history – provides a vital framework for ensuring that the rights, needs, and voices of children remain central wherever AI systems intersect with the structural conditions that can sustain or alleviate child poverty.

The CRC is grounded in four principles:

- (1) Right to Non-Discrimination
- (2) Best Interests of the Child
- (3) Right to Respect for the Views of the Child
- (4) Right to Life, Survival & Development.

To ensure that advances in AI benefit all children, especially the most vulnerable, these four principles should guide initiatives aimed at addressing child poverty and improving the factors that shape children's well-being and living conditions. AI holds great promise, and when steered by children's rights and accompanied by vigilance toward its risks, it can be a powerful tool in the fight against child poverty.



AI Tools for Poverty Eradication

AI-Driven Poverty Mapping and Identification

Tools using satellite imagery and mobile data to identify vulnerable households and communities for targeted welfare programs (e.g., Togo's COVID-19 cash transfer program).

Citizen Science Data Integration Platforms

Combining community-collected environmental and social data with AI to better understand and address local poverty nuances.

Predictive Analytics for Social Protection

AI systems analyze multi-source data to predict poverty risks and optimize social welfare delivery to those most in need.

Agricultural AI Solutions

Precision farming tools that recommend optimal crops and planting schedules, detect pests, and manage irrigation to increase yields for smallholder farmers.

Anti-Corruption and Fraud Detection Tools

AI algorithms detect irregularities and fraud in aid disbursement to ensure resources reach intended beneficiaries.

AI-Powered Education Platforms

Personalized learning tools improve educational outcomes for marginalized populations, increasing opportunities for upward mobility.

Financial Inclusion and Credit Scoring AI

AI models evaluate alternative data, enabling access to microloans and financial services for those without formal credit histories.

Health Monitoring and Telemedicine Solutions

AI-driven health platforms detect malnutrition, disease outbreaks, and enable remote care services for impoverished populations.

Enabling v. Endangering – AI in Migration

Vince Yalçın, The Netherlands

In recent years, applications of Artificial Intelligence (AI) systems and technologies in the areas of migration and asylum have become more widespread; actors progressively utilise, develop, and rely on AI tools and systems throughout the whole migration cycle, stating increased efficiency in addressing migratory streams, enhanced risk mitigation, effective cost-cutting, and minimising of waiting times. From AI-enabled border enforcement, surveillance, identity verification, and movement forecasting for the provision of humanitarian assistance, to asylum application triaging and decision-making, we may regard the future as regards ‘AI in migration’ as opportunity-rich.

Yet, perhaps, we should be cautiously optimistic; indeed, new technologies provide pathways towards increased efficiency and adaptability while addressing a complex phenomenon such as migration – especially in light of an increasing globalisation of migratory movement across greater distances in an ever-more digitalising world. However, critics note that, depending on how AI technologies may be designed, developed, and deployed, and particularly the intent behind their application, negative

consequences may arise. Cascading errors due to poor quality of big data sets and black boxes - induced obscured algorithmic decision-making, as well as algorithmic biases, lack of transparency, and conflicting responsibilities, all contribute to the uncertainty that may lie ahead.

Furthermore, we must address the existing and growing Global North/South divide. In a multipolar world, where such asymmetry is highlighted through a skewed distribution of wealth, differential access to basic needs, and a disproportionate instability in the Global South, people, and ultimately those on the move, are affected unequally. Where Global North actors are well-engaged in the development, decision-making, implementation, and regulation of AI systems and technologies in the areas of migration and asylum, the Global South – most heavily affected by instability, poverty, and natural disasters, and from within/which most migratory movement occurs – is left out of the discussion. Ultimately, this affects people as applications of AI leave migrants at risk of violation of their human rights, further entrenching existing divides and reinforcing the current multipolar power structures around AI.



AI Tools and Actions for Migration

Therefore, one may ask, how can we safeguard the interests and rights of those at the margins of society?

Action 1: The established multipolar ‘AI world order’ must cooperate through dynamic relationships that highlight the straightening out of global digital divide and AI North-South disparity by involving Global South actors in decision-making.

Action 2: Durable investment in Global South actors’ capacity to contribute to the global digital and technological transformation would reduce deprivation among people, while enhancing human rights protection, and potentially alleviating migratory pressures.

Action 3: Application of AI systems and technologies and their development should follow risk analysis of potential negative outcomes, especially taking into account the impact on vulnerable persons, such as people on move, and their human rights.

Predictive analytics for migration flows

AI algorithms can assist in forecasting anticipated migration influxes & deciphering migration patterns and routes, helping NGOs, humanitarian actors & governments

address potential crises and human rights violations. Usage should only aid the implementation of humanitarian assistance, rather than AI models’ exploitation for border management, securitisation, and criminalisation purposes that could lead to human rights violations and reinforcement of narratives about migrants as a ‘threat’.

AI-enabled asylum application triaging, vulnerability detection and translation

AI models may ease asylum application processes due to their ability to process large amounts of data, summarise interviews, assist in translation, identify the nationality of a person, and assess individual circumstances to identify vulnerable persons in need of special protection. For now, AI models can only serve an assisting role to mitigate risks of inaccurate and biased decision-making & data privacy violations.

Automated identity verification processing for border security

Facial recognition systems help verify people’s identities at border crossings, automating entry processes while improving accuracy and reducing processing times. We must however consider impact on privacy and of possible biases.

Elevate Human Communication with AI

For Sustainable Development and Social Justice

Dr. Joshua Karras, Australia

In an increasingly interconnected yet fragmented world, Artificial Intelligence (AI) presents an unparalleled opportunity to transform how humans communicate with one another to drive collective progress on sustainable development and social justice. Beyond enhancing information exchange, AI can foster empathy, inclusivity, and cross-cultural understanding—critical components of global cooperation and equity.

AI-enabled tools such as real-time translation engines, sentiment analysis models, and conversational interfaces can dismantle linguistic and socio-cultural barriers that often impede meaningful dialogue. These technologies empower individuals and communities—particularly those historically marginalised—to engage actively in public discourse, influence policy, and co-create solutions aligned with the Sustainable Development Goals.

Further, AI can personalise communication strategies at scale, tailoring educational content, advocacy messaging and

behavioural nudges to diverse audiences. This fosters deeper civic engagement and more targeted interventions, whether in advancing climate literacy, promoting gender equity, or defending human rights. By deploying AI in media monitoring and misinformation detection, we can safeguard the integrity of public debates, especially around polarising issues.

These benefits though can only be realised through a principled approach. Ethical oversight, data governance, and inclusive design must anchor all AI applications. Communities must be co-creators, not passive recipients of AI-powered systems. Transparency, cultural sensitivity, and accountability are non-negotiable.

Australia, with its multicultural fabric and robust research ecosystem, is well positioned to lead in developing equitable AI communication frameworks that uphold human dignity and democratic values and is a catalyst for deeper, more advanced justice and sustainability for all.



AI Tools for Public Health & SDGs

AI4Health by WHO

This flagship initiative supports countries in safely integrating AI into health systems, i.e. diagnostics, forecasting, and health system planning.

BlueDot (Canada)

Used AI and natural language processing to detect COVID-19 risks before WHO alerts, showcasing early outbreak detection.

Baobab Health (Malawi)

Combines AI with mobile technology to improve maternal health outcomes in remote areas.

Ubenwa (Nigeria/Canada)

Uses AI to analyze newborn cries for early detection of birth asphyxia, reducing neonatal mortality.

PAIGE.AI (USA)

Enhances cancer diagnostics using pathology image analysis for early and accurate treatment.

Media Disease Surveillance (MDS)

This AI system tool scans news and digital sources to detect outbreaks early and provide actionable intelligence for public health responses.

ARMMAN's AI

These algorithms predict beneficiaries at risk of dropping out from maternal health programs.

The WHO Guidance on Ethics and Governance of AI for Health

Outlines six core principles including inclusiveness, transparency, accountability.

UNESCO AI Ethics

The Framework calls for robust safeguards against bias and exploitation, especially in low-resource settings.

Virtual Health Assistants and Telehealth

AI-powered chatbot assistants expand access to health information and triage services, facilitating remote care.

Indigenous Digital Self-Determination

Cintya Huaire Huaynalaya, Peru

Global conversations on AI multipolarity often ask where power resides, but rarely, *whose intelligence is being recognized*.

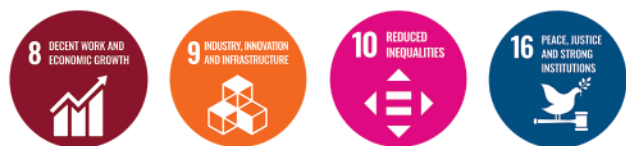
As someone with roots in rural Andean Peru, I only began to understand what it means to belong to a cultural minority once I stepped outside of it. Growing up, my parents chose not to pass on Quechua, not out of indifference, but out of fear of how we might be perceived. That quiet decision, shaped by centuries of exclusion, echoed far beyond language. Now, working on digital transformation and data analysis, I see how these dynamics reappear, sometimes invisibly, in the technologies we design and deploy.

In Latin America and the Caribbean, over 42 million people, about 6.7%, identify as Indigenous, with 80% concentrated in Mexico, Guatemala, Peru, and Bolivia (World Bank, 2024). In Peru the latest census (INEI, 2017) detail that about 25% self-identify as Indigenous, while nearly 60% identify as *mestizo*, a choice shaped by social hierarchies in which whiteness is

still valued, and *mestizo* can feel like a safer middle ground. But digital inequalities remain stark: over 200 million people lack broadband, and rural coverage (62%) lags behind urban areas (82%) (ITU, 2024).

The capability approach helps to frame this gap. As Amartya Sen (1999) & Martha Nussbaum (2000) argued - development is the expansion of real freedoms: to learn, work, participate, speak one's language, and sustain cultural life, and that dignity requires supporting them, from education and health to participation and cultural expression. Applied to AI, this means technology should expand Indigenous capabilities: safeguarding language and knowledge, enabling voice in decision-making, and creating fair economic opportunities, not reinforcing extraction or exclusion.

This reframes AI multipolarity. It is now about multiple centers of technological power; about multiple worldviews shaping design and governance and pluriversal AI.



AI Tools for Indigenous Communities

Language Revitalization AI Tools

AI models trained on endangered Indigenous languages help document, preserve, and teach these languages. Examples include chatbots like *"Masheli"* for Choctaw, and the *"Skobot"* robot that speaks *Anishinaabemowin*, designed to foster dialogue skills in Indigenous youth.

Digitization and Transcription of Oral Traditions

AI-powered transcription services convert oral stories, songs, and histories into digital archives to maintain cultural heritage across generations.

Indigenous Data Sovereignty

AI projects co-designed with Indigenous communities prioritize control, protection of Indigenous data, ensuring that AI

supports cultural rights and sovereignty rather than exploitation.

Virtual and Digital Tourism Tools

AI-enhanced digital storytelling and virtual tours that promote Indigenous cultures and support Indigenous-led tourism and economic opportunities.

Culturally Grounded Ethical AI Development

Indigenous-led AI development embeds values such as relationality, consent, and accountability into technology design, fostering respectful AI systems aligned with community laws and traditions.

Educational AI Inclusion Programs

Programs like *IndigiGenius* offer culturally relevant AI and CS education.

1. Sen, A. (1999). *Development as Freedom*. New York: Alfred A. Knopf.

Nussbaum, M. C. (2000). *Women and Human Development: The Capabilities Approach*. Cambridge University Press.

2. International Telecommunication Union. (2024) DataHUB.. Individuals with ICT skills, by degree and year. . <https://data-hub.itu.int/about/>

3. World Bank. (2024). *Indigenous Latin America in the twenty-first century: The first decade* [Brief report page]. World Bank. <https://www.worldbank.org/en/region/lac/brief/indigenous-la-in-america-in-the-twenty-first-century-brief-report-page>

4. Instituto Nacional de Estadística e Informática (INEI). (2018). *Perú: Perfil sociodemográfico. Informe nacional (Censos Nacionales 2017: XII de Población, VII de Vivienda y III de Comunidades Indígenas)*. Lima: INEI.

PEACE



Atomic Dome at Hiroshima
Where the Nuclear Bomb was dropped in WWII

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Can AI Become a Moral Being?

Ashley Hou, China

Learning constitutes a fundamental attribute shared by artificial intelligence (AI) and humanity. From Socrates in Greek philosophy to Confucius in Chinese thought, learning has been central to human progress. Similarly, AI—even without physical form—exhibits autonomous learning, self-regulation, and the capacity to act on acquired knowledge.

Yet despite this common ground, human attitudes toward AI differ starkly from those toward hypothetical extraterrestrial entities. Facing an external extraterrestrial threat, humanity would likely unite. With AI, however, distrust among humans often surpasses distrust in AI, reflecting the insight from *Dream of the Red Chamber*: "A great clan cannot be destroyed by external forces; as the saying goes, 'A centipede, though dead, does not stiffen'—it perishes only when it destroys itself from within." AI's impact remains unforeseeable, including its internal dynamics. At worst, as **The Three-Body Problem** warns: "*To destroy you has nothing to do with you.*"

Such a scenario is plausible, demanding preparedness and precluding unconditional trust in AI.

To address these risks, global unity is imperative for the prudent development of AI. We propose the establishment of a moral database, encompassing diverse cultural ethics, to guide AI learning—given its proficiency in this domain. Philosophers must lead this effort: while universal morality has eluded humanity, the AI era necessitates consensus. This database should underpin AI training, enabling responsible advancement. Such constraints are essential to safeguard humanity's long-term well-being. Thus, unity, mutual trust, and prioritization of moral philosophy and dataset development are critical to collective action on AI. Otherwise, AI's convenience may act like "boiling a frog in warm water," leading to unintended catastrophe.

Religious AI is a new and rapidly evolving frontier that will change *humanity*.



AI Tools for Philosophy

Philosopher by YesChat

This tool is a dedicated AI philosophy assistant powered by ChatGPT-4o, designed to support philosophical exploration, help construct arguments, and guide scholarly writing. It's suitable for deep philosophical discussions, critiques of arguments, and learning about ethical implications or philosophical traditions.

Mindko Philosophy AI Solver

Mindko offers a free, tailored AI solver for philosophy. Users can ask questions and get instant solutions with step-by-step explanations, making it a useful resource for homework help and general philosophical problem-solving.

DeepAI Philosophy Teacher

This web service provides an AI philosophy teacher for in-depth conversations and learning about different philosophical theories and their application in daily life.

ChatGPT, DeepSeek

ChatGPT and DeepSeek can break down intricate philosophical arguments, generate summaries, provide counterpoints, and facilitate debates.

Copilot in Microsoft 365

Integrated within Microsoft apps, Copilot helps analyze, summarize, and generate philosophical content, making it easier to comprehend complex texts, prepare teaching materials, and draft discussion questions.

NotebookLM

Useful for organizing, summarizing, and managing course material and research notes for philosophy studies, incorporating audio summaries and advanced synthesis of knowledge.

Preserving Memory in the Digital Age

Ayame Hirasawa, Japan

This August marks 80 years since the end of the Second World War, a milestone that prompts Japan to reflect on the fragility of peace and the enduring weight of history. Citizens continue to recall personal and familial memories, yet these remembrances unfold against a shifting political landscape, exemplified by the recent gains of a far-right nationalist party in the upper house election.

Since 1945, Japan has invested heavily in the preservation of war memories, both through public archives and private testimony. These efforts reinforce the pacifist stance embedded in Article 9 of the Constitution, drafted in recognition of the militarist role in the nation's past. But the passage of time imposes an inevitable limitation: the dwindling number of survivors who can bear direct witness. As their voices fade, the question grows urgent —

How can memory be transmitted authentically to generations with no living link to the war?

For younger people, the conflict often appears distant, mediated by grainy photographs and stiff archival footage. Such materials struggle to convey the immediacy of lived experience. Here, AI and immersive technologies present new possibilities. AI-driven tools can restore color to monochrome images, sharpen blurred films, and create reconstructions that breathe vitality into static records.

The Watanabe Hidenori Laboratory at the University of Tokyo exemplifies this effort. Its projects range from colorizing wartime photographs to building VR maps of Hiroshima and Nagasaki, allowing global audiences to explore victims' experiences.

These initiatives highlight the broader potential of AI not simply as a technical advance, but as a cultural instrument. As UNESCO long asserted, by reanimating the past and fostering empathetic encounters with history, emerging technologies may help constructing the defenses of peace in the minds of men in the 21st century.



AI Tools for Political Equity

AI for Inclusive Governance

AI tools can draft, simulate, and analyze policy initiatives for equity impacts, highlighting areas of underrepresentation and enabling data-driven decision-making for equitable governance. These systems may be integrated into government advisory platforms or custom public policy tools.

Bias Monitoring & Policy Analysis

Machine learning on social media platforms can highlight "filter bubbles" and "echo chambers," providing insights into information silos and their impact on political pluralism. AI tools help regulatory bodies and researchers assess and mitigate biases in political communication, promoting more balanced public discourse.

Generative AI Campaign Platforms

AI enables smaller parties to reach large electorates at reduced costs through automated calls, personalized messaging, and regional content generation. This helps

level the political playing field, particularly in countries with vast constituencies such as India. Examples include AI anchors (like CPI(M)'s "Samata"), party apps (BJP's Saral app), and social media campaign tools.

Policy Modeling & Speech Analysis

Deep learning tools analyze speeches/debates to advise candidates on impactful topics or simulate policy effects before implementation.

Sentiment Analysis & Real-Time Feedback

AI tracks public sentiment by mining social media and news, allowing campaigns to adapt messaging and address emerging issues. Here platforms such:

1. *Palowise* (political sentiment mining),
 2. *Hootsuite* sentiment tools
- can be used.

When Militarised AI Goes to War

Ayush Garg, India

Artificial intelligence and autonomy are reshaping warfare. Modern militaries field drone swarms, robotic vehicles and automated sensors, challenging conventional command. The use of lethal autonomous weapons systems (LAWS) - that can select and engage targets without human input, is a *novel development* presenting grave stability risks. Conflict in Libya (2020) witnessed the first such use case of LAWS as per UN Security Council records.¹ The case demonstrates how in realistic combat, militarised AI can prove brittle and result in *unanticipated lethal actions*.

U.S. Department of War Strategy

The U.S. Department of War treats AI mainly as a decision-making multiplier, emphasizing on rapid adoption of autonomy to *target faster, get more precise kill chains & improve situational awareness*. While U.S. security strategists believe that AI-enabled systems can accelerate military commanders' decisions and accuracy, playing a **decisive role** in deterring a fight and winning a fight; they also insist on human oversight, as articulated in the

international “*Political Declaration on Responsible Military Use of AI and Autonomy*.” Currently, the U.S. Military Industrial complex is focused on augmenting, not replacing human military planners.

Chinese PLA Advances

China's PLA is pursuing an AI-driven “*intelligentized*” warfare. Official Chinese doctrine links AI to faster decision-making and higher efficiency. PLA strategists leverage China's **Civil-Military Fusion** to integrate civilian AI R&D across all domains: fielding UAV swarms, unmanned vessels and other autonomous platforms. This reflects a high-confidence push: with PLA testing large-scale swarms, networked AI sensors to exploit military edge.

Strategic Security Implications

Great power competition and AI arms race will compresses crisis timelines, escalating conflicts faster, forcing technologically weaker adversaries to resort to asymmetric options like *terrorism*, which has a unique ability to upend strategic status quos, as witnessed in the Oct 7, 23 attack on Israel.



AI Tools in use by Militaries

Project Maven

The Pentagon's target recognition & threat monitoring initiative. Under this, AI enhances real-time target identification using sensors, video and satellite data, reducing human error in combat and improving situational awareness

Aegis Combat System (U.S.)

This autonomous weapons and combat system can carry out complex tasks under hazardous conditions with precision targeting and reduced human involvement.

Militarised Drone Swarms (China)

Groups of AI-coordinated drones operate cooperatively in intelligence, surveillance, reconnaissance and combat missions, with individual autonomy.

THAAD Missile Defense

Real-time AI analysis supports battlefield decisions and operational execution.

F-35 Jets Predictive Maintenance

AI algorithms analyze data from sensors to predict equipment failures before they occur, improving readiness and reducing downtime for U.S. Air Force's Condition Based Maintenance Plus for F-35 jets.

Autonomous Cyber Warfare

AI systems detect network anomalies, respond autonomously to threats, and learn from past cyber attacks to protect vital military IT infrastructure.

AI Facial Recognition and Surveillance

AI-powered systems identify individuals at military bases or in surveillance feeds for security and intelligence purposes.

AI for Target Selection, Strike Planning

Controversial AI systems used to generate lists of targets, including from civilian areas, in combat settings.

1. United Nations Security Council. (2021, March). *Final report of the Panel of Experts on Libya established pursuant to Security Council resolution 1973 (2011) (S/2021/229)*.

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/N21/037/72/PDF/N2103772.pdf?OpenElement>

The World of AI-Enabled Policing

Law Enforcement's Revolutionary New Intelligent Applications

Phirapat Mangkhalasiri, Thailand

Artificial Intelligence (AI) is transforming policing across Southeast Asia, including in Thailand, where law enforcement agencies are increasingly exploring AI's potential to address complex and evolving crime threats. From predictive modelling to biometric identification, AI offers unprecedented opportunities to enhance operational efficiency and public safety.

In Thailand and neighbouring countries, law enforcement faces growing challenges from transnational organised crime, online child exploitation, human trafficking, and cyber scams. AI-powered systems, such as natural language processing tools for digital investigations, facial recognition at border checkpoints, and real-time surveillance analytics, are emerging as force multipliers. These tools can process and interpret massive datasets, uncover hidden patterns, and support timely, intelligence-led interventions.

One example is the use of AI to triage and prioritise child sexual abuse material (CSAM), enabling rapid identification of

victims and offenders. Similarly, predictive models are being trialled to anticipate crime hotspots and guide patrol deployment, particularly in urban centres.

Yet, the integration of AI into policing in the region raises critical concerns. Questions of data governance, algorithmic bias, and the risk of over-surveillance remain pressing. In contexts where legal safeguards and digital literacy vary widely, there is a danger that AI could exacerbate existing inequalities or erode civil liberties.

As Europol highlights, responsible AI deployment requires strong legal frameworks, inter-agency cooperation, and public engagement. For Southeast Asia, cross-border collaboration and capacity building will be key, ensuring AI systems are not only effective, but also aligned with democratic values and human rights.

The future of AI-enabled policing in Thailand and the region must strike a careful balance between harnessing innovation while safeguarding *trust*.



AI Tools for Law Enforcement

Computer Vision-Based Analytics

AI can analyze video feeds from public and private cameras, automatically detecting suspicious activity, weapons, abandoned objects, or identifying suspects through facial recognition. Examples include Clearview AI (facial recognition), Flock Safety (license plate recognition), Patternizr (crime pattern matching in New York City).

Real-Time Crime Centers

Integrated AI platforms combine CCTV, gunshot detection, and license plate data for immediate situational awareness and rapid incident response in cities like New York and London.

Crime Hotspot Forecasting

Machine learning models analyze crime data, demographics, and external trends to predict future crime locations and help allocate patrols proactively. Examples include LAPD, London MET, and major Indian cities use AI hotspot mapping.

Digital Forensics and Data Analysis

AI platforms (e.g., Cellebrite, Palantir) sift through digital evidence, call logs, social media, and case files to link suspects, identify patterns, and surface critical leads, drastically reducing investigation time.

AI enabled Biometric Identification

AI-enabled fingerprint, face, and palm print comparison platforms streamline identification in criminal databases with enhanced accuracy and faster matching.

Automated Tagging & Entity Resolution

AI assists in organizing unstructured data, generating dossiers, tagging relevant entities, and summarizing large case files for more efficient legal processes.

Responsible AI Toolkit

Specialized platforms train officers to use AI tools ethically and transparently, emphasizing auditability and public accountability.

AI in Modern Conflict

A Call for Human-Centered Security

Victoria Smith Lind, Sweden

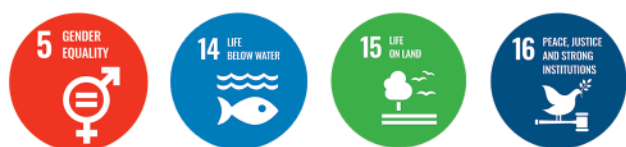
Artificial intelligence is increasingly shaping both how we look at security, but also modern conflicts. AI can serve both as a strategic tool, but also as a potential security threat. As AI-driven technologies like surveillance systems, cyberattacks and algorithmic manipulation become more prevalent, their impact on civilians is steadily growing. Ensuring responsible and secure use of AI is no longer a choice, it is an urgent necessity.

In today's complex warfare landscape, AI is used in everything from autonomous drones to psychological operations and deepfakes, completely reshaping how warfare is conducted. These technologies not only influence how conflicts are fought, but also how information is controlled and societies are destabilized. A central concern is that AI systems often reflect existing societal biases. When used in conflict, biases tend to reinforce discrimination, drive misinformation, and cause disproportionate harm to vulnerable populations. AI systems often operate with limited transparency. Information of how

AI algorithms operate is frequently missing as well as what data is used, affecting how reliable their outcomes are. This lack of accountability creates serious risks, particularly when deployed in conflict sensitive environments where human lives are at risk.

As the EU implements the AI Act, the world's first major legislation on AI, it is vital that regulation prioritizes human rights and cybersecurity. Strengthening cybersecurity is not only about digital defense; it is about safeguarding essential infrastructure such as electricity, water, healthcare, and financial systems. AI can, and should, support this work in order to achieve the highest level of security.

Further, the United Nations has a key role to play in coordinating global norms and protections. To ensure peace and security, we must promote a human-centered approach to AI, one that balances innovation with responsibility and places humanity at the core of decision-making.



AI Tools for International Law

Cellebrite Pathfinder and UFED Cloud

These are tools for digital forensics, analyzing data from electronic devices (phones, computers) to uncover connections in criminal cases and support international collaboration.

Palantir Technologies

A data integration and analysis platform used by law enforcement and international agencies to detect criminal networks, analyze communications, and support evidence-based prosecutions.

INTERPOL AI Toolkit

A responsible AI framework developed by INTERPOL and UNICRI, offering practical tools and guidelines for ethical AI use in law enforcement aligned with human rights and policing principles.

AI-Powered Surveillance Systems

Computer vision tools for automatic detection of suspicious activities, facial recognition, and monitoring large data.

NLP Engines for Document and Case Analysis

AI systems that scan and analyze large volumes of legal and investigative documents to surface patterns, link suspects, and speed up international investigations.

Automated Evidence Tagging & Entity Resolution

AI that organizes unstructured data, tags relevant entities, and distills insights from global legal evidence for international law enforcement.

AI-Based Risk Assessment and Network Disruption

Systems to map, dismantle transnational criminal organizations by analyzing financial flows and communication.

Predictive Policing Tools

Machine learning models that forecast crime hotspots for incidence prevention.

AI and Complex Humanitarian Emergencies

Melanie Echeverría, Guatemala

Artificial Intelligence is rapidly reshaping complex humanitarian emergencies and action, by enabling data-driven anticipation and faster response. Modern machine learning and AI data fusion have made it possible for agencies like *United Nations Office for Coordination of Humanitarian Affairs*, *International Committee of the Red Cross* and *Médecins Sans Frontières* to **forecast crises** and prepare interventions. AI based anticipatory tools mark a shift from reactive relief toward proactive preparedness, enabling early mobilization of aid and saving lives.

Once disasters strike, artificial intelligence now aids in **real-time response and situational awareness**. Deep-learning platforms analyze satellite and drone imagery to rapidly map floods, wildfires or conflict damage. In practice, AI-enhanced mapping and text analytics have been used in recent crises like the Mozambique floods, Türkiye–Syria earthquakes, Hurricane relief and others to speed up damage assessment and target relief where it is most needed.

AI also optimizes healthcare and logistics in emergencies. Chatbots and translation tools connect displaced people to medical and social services; for instance, AI-driven health assistants in refugee camps provide vaccine guidance and bridge language barriers. Machine-learning models help predict outbreaks like cholera in camps, by mining environmental and migration data. Logistics algorithms schedule and route supplies efficiently, and telemedicine triage systems allocate scarce clinical resources.

Challenges and Ethics

Humanitarians stress that AI is not a *panacea*. Data quality, privacy and bias are serious concerns. Poor data (incomplete, outdated or biased) can lead to harmful decisions. Agencies like OCHA, ICRC, MSF, etc. advocate strict **“Do No Harm” principles**. Humanitarian crises are already seeing AI assist in forecasting, mapping, and aid coordination; *the promise is great*, but careful governance is essential to make it *human*.



AI Tools for Complex Emergencies

UN's "Early Warnings for All"

uses AI models to fuse satellite, radar, social media and IoT data, sharpening hazard forecasts & delivering population specific alerts in real time.

UNHCR's Project Jetson

An AI based predictive analytics project that forecasts forced displacement.

IFRC's Forecast-Based Financing

Uses weather and market data to trigger resource allocation and prepositioning.

UNOSAT's Rapid Mapping Service

Employ AI on imagery and crowd-sourced data to identify affected zones needing urgent humanitarian aid.

Emergency Situation Awareness

Social-media monitoring tools that classify crisis-related posts to pinpoint emerging needs across geographic locations in real-time, allowing for the quick deployment of precious resources.

ICRC's "Trace the Face"

Uses facial recognition to reunite separated families, and messaging chatbots deliver critical information to refugees.

HealthMap, Epi-tools

Disease surveillance & outbreak detection systems for early detection of outbreaks and prediction of epidemic hotspots. The tools use rapid signals to trigger investigation and start targetted vaccination campaigns.

MapAction, HDX integrations

Decision-support dashboards & interactive visual analytics that present AI outputs to operational teams with uncertainty bounds and scenario exploration.

OpenStreetMap, fAIr

AI-assisted mapping for volunteers provides local AI models to speed OSM tasks used in earthquake and flood responses.

Bridging the AI Gap in Climate Adaptation

David Chikwaza, Zimbabwe

Artificial Intelligence, as a hallmark of the Fourth Industrial Revolution, reflects patterns of inequality that have historically shaped previous industrial transformations. Yet, despite its growing influence, many communities, especially in the Global South, remain excluded from the design, deployment, and use of AI technologies. This is particularly concerning in the context of climate change adaptation, where inclusive innovation is crucial.

The Intergovernmental Panel on Climate Change (IPCC) defines climate adaptation as the process of adjusting to current or anticipated climate impacts to reduce harm or seize potential benefits. These adjustments span natural, social, and economic systems and involve shifts in practices, policies, and structures. Climate adaptation is integral to achieving the Sustainable Development Goals (SDGs), including SDG 13 (Climate Action), SDG 2 (Zero Hunger), and SDG 15 (Life on Land). AI is transforming climate change adaptation by enhancing predictive capabilities, optimizing resource management, and improving decision making processes. AI-powered tools are

enabling more accurate climate modeling, better disaster preparedness, and more efficient resource allocation in areas like agriculture and energy.

However, to build effective and equitable climate resilience, it is essential that all regions, both in the Global North and Global South, participate fully in the AI revolution. This means not only being end-users but also co-creators of AI technologies. Knowledge systems informing AI development must embrace diverse perspectives and insights, regardless of geographic origin.

For AI to support global climate goals, it must be shaped by inclusive collaboration and empowered stakeholder participation in shaping and benefiting from a digital future. Drawing equally from scientific, indigenous, and local knowledge across regions can ensure that AI solutions are relevant, fair, and sustainable. Only by bridging this gap can we ensure that AI becomes a truly global tool for climate resilience, rather than a force that deepens existing inequalities.



AI Tools for Decolonial Adaptation

Decolonizing Language

Language AI tools (e.g., custom-trained Natural Language Processing models) can review and transform lexicons, replacing colonial or pejorative language with vocabulary aligned to indigenous or local perspectives.

Decolonial Digital Humanities

AI-assisted approaches in humanities research, targeting the recovery and visibility of suppressed histories and knowledge systems.

Bias Detection and Correction

AI algorithms are increasingly used by libraries, archives, and museums to identify discriminatory or colonial terminology in catalogues, expose omissions of marginalized groups, and resurface overlooked histories and artifacts. Examples include AI-based cataloguing systems, digital archiving projects with bias-identification capabilities.

Centering Dignity and Agency

The movement to decolonize AI seeks to center dignity and agency over technological dependency, advocating for AI systems that respect cultural values, social dignity, and environmental justice. Practical approaches include collaborative frameworks, inclusive governance, locally-led research and innovation.

Decolonising AI in Education

AI ethics in education is evolving to address racialized and imperialistic structures, making curricula and learning systems more equitable and reflective of diverse epistemologies.

These tools and approaches help unmask, repair, and remodel colonial legacies in data, algorithms, language, and governance, advancing the cause of decolonisation through AI.

AI for Diplomacy in a Multipolar World

Dr. Khouzeifi Isaakha Doud-bane, Chad

In today's complex global landscape, Artificial Intelligence (AI) offers transformative opportunities to reshape diplomacy and peacebuilding through inclusion, foresight, and local ownership. As a Chadian diplomat, international consultant, and advocate for sustainable development, I view AI not merely as a tool, but as a shared responsibility one that must bridge divides and rebuild trust in fragile and conflict-affected settings.

From 8 to 11 July 2025, I participated in the AI for Good Global Summit hosted by the International Telecommunication Union (ITU) in Geneva. I contributed to high level dialogues on governing AI for diplomacy and peace, amplifying African voices and stressing the need for human-centered, inclusive, and culturally grounded AI systems. I also addressed the dangers of digital exclusion and the need for local actors to co-own peacebuilding processes.

AI for diplomacy must prioritize multi-stakeholder collaboration, especially from

underrepresented regions like Africa. Our voices must shape the data, narratives, and decision-making frameworks used in AI tools for conflict prevention, negotiation, and reconciliation. Technologies like multilingual AI and predictive analytics can support early warning systems but only if anchored in local realities.

At the intersection of diplomacy and digital governance, we must enforce ethical standards that uphold human rights, transparency, and equity. From youth engagement to local governance, I have seen how inclusive technologies empower communities when developed with care.

To build sustainable peace in a multipolar world, we must promote digital solidarity. This means advancing AI literacy among diplomats, strengthening South-South cooperation, and integrating indigenous knowledge into AI peace architectures. Africa's role in global peace cannot be automated but it can be amplified by ethical AI rooted in dignity, fairness, sovereignty and resilience.



AI Tools for Diplomacy

Natural Language Processing (NLP) and Translation

AI translation tools facilitate instant communication and understanding between parties from diverse linguistic backgrounds, breaking down barriers in negotiations and public diplomacy. Platforms include: Google Translate AI, Microsoft Azure Translator, custom diplomatic NLP engines.

Predictive Analytics and Conflict Modeling

Predictive models analyze historical and real-time data to forecast outcomes of diplomatic moves, identify sources of conflict, and provide early warnings for instability. Tools include: Custom AI-based risk prediction platforms.

Sentiment and Trend Analysis

Machine learning algorithms scan global media and social platforms to track public sentiment, emerging trends, and influential actors, informing diplomatic strategy in

real-time. Platforms include: Palowise, GDELT Project, DiploAI sentiment and keyword analysis tools.

Automated Content Generation

AI aids diplomats in drafting speeches, social media messages, and reports at scale, allowing practitioners to focus on strategic messaging and relationship-building.

AI-Driven Research and Knowledge Mining

Tools rapidly analyze, summarize, and distill insights from massive document sets, supporting faster decision-making and policy development in complex diplomatic environments.

Security and Deepfake Detection

AI helps verify the authenticity of images, audio, and video, protecting diplomatic communications from manipulation and misinformation.

Feminist AI Ethics in Peacebuilding

Stacey Nicole Bellido, The Philippines

As artificial intelligence is embedded in peacebuilding frameworks across the Indo Pacific, the region stands at a pivotal ethical juncture. AI systems are being used to monitor risks, allocate aid, and document violations. However, when deployed without feminist ethical safeguards, they risk reinforcing structural gender inequalities and rendering invisible the voices and needs of the most affected.

Feminist AI ethics offers a forward-looking corrective. It reframes AI design around equity rather than efficiency, calling for systems that are transparent, inclusive, and co-developed with women, LGBTQ+ individuals, marginalized communities. Rather than seeing bias as a technical flaw alone, it recognizes it as a product of entrenched power structures and seeks to center lived experiences in development and governance of peace technologies.

Why the Indo-Pacific?

The Indo-Pacific is a region of complex conflict dynamics, digital transformation, and rising geopolitical stakes. From

Myanmar to Northeast India and West Papua, conflict-affected areas are now testing grounds for AI surveillance tools, often without human rights oversight. In Myanmar, NLP models track hate speech in Burmese and Rohingya, but often miss coded gendered threats. In Bangladesh's Rohingya camps, biometric profiling for aid distribution has raised concerns over consent and the exclusion of women from data registration processes.

ASEAN's 2025 AI for Gender Justice Forum has catalyzed regional cooperation on ethical AI, calling for mandatory gender audits of security, humanitarian AI tools.

In a multipolar Indo-Pacific, feminist AI ethics is not just about fairness, it is a strategic imperative. It builds trust in institutions and prevents algorithmic marginalization ensuring that peace technologies reflect diverse realities rather than imposed definitions. By leading on feminist aligned AI governance, Indo Pacific actors can shape global norms for more just and resilient peace systems.



AI Tools for the Indo-Pacific

AI-Driven Industry & Urban Solutions

Countries like Singapore, Japan, South Korea, and Taiwan use AI for smart city infrastructure, resource management, and addressing demographic challenges such as aging workforces. Example: Singapore's "Smart Nation" which utilizes AI-enabled 5G networks and software tools for urban optimization.

AI as a Geopolitical Strategy

Intense US-China competition shapes AI development with state-driven models in China and innovation-driven approaches in the US and allies (e.g., AUKUS).

Harmonizing AI Policies

Countries pursue varying regulatory frameworks from "pro-innovation" to "pro-security," creating both opportunities and challenges for cross-border cooperation and responsible AI use. Such platforms include ASEAN's AI for Development and the Quad's technology working groups.

Defense and Deterrence

AI and emerging technologies like quantum computing enhance rapid decision-making and strategic deterrence capabilities across the Indo-Pacific.

Autonomous Surveillance Systems

AI-powered drones and unmanned vessels extend sensor coverage in contested areas, reducing risk and cost compared to manned missions.

Disaster Management and Climate Resilience

AI-powered early warning systems and resource allocation models help respond to natural disasters, a critical need in the Indo-Pacific region, which is prone to typhoons, earthquakes, and flooding, at an increasingly alarming rate due to climate change.

Peace within AI for Humanitarian Action

Marine Rabut, Switzerland

In 2025, the promise and peril of AI are unfolding against a backdrop of escalating global instability. Ongoing conflicts in Sudan, Ukraine, Gaza, Haiti, and the Sahel have displaced millions, while climate driven disasters intensify humanitarian needs. These crises coincide with decisive diplomatic moments, from the UN Summit of the Future follow-up to negotiations on an international AI governance framework. In this fragile landscape, the role of AI in advancing peace within humanitarian action is both urgent and unprecedented.

Opportunities

AI can strengthen peace-building by enhancing the speed, accuracy, and scope of humanitarian decision-making. Predictive analytics can anticipate conflict flash-points, enabling preventive diplomacy and early humanitarian deployment. Satellite imagery, paired with AI-powered analysis, can detect troop movements, environmental degradation, or infrastructure damage, informing impartial needs assessments. Natural language

can monitor hate speech trends across multiple languages, flagging incitement before it escalates into violence. Post conflict, AI can support reconciliation by mapping stakeholder networks, identifying misinformation campaigns, and ensuring aid reaches those most in need, regardless of political alignment.

Challenges and Risks

These same technologies can undermine peace if misused. AI-driven surveillance systems may erode trust between communities and humanitarian actors. Autonomous weapons and algorithmic targeting threaten to accelerate warfare beyond human control, undermining international humanitarian law. In fragile contexts, opaque AI decision-making can reinforce bias, marginalise vulnerable groups, or prioritise efficiency over dignity. A 'peace technology divide' may also emerge, where only well-resourced actors access advanced AI tools, leaving conflict-affected regions reliant on externally designed systems with limited local relevance.



AI Tools for Humanitarian Action

AI-Powered Forecasting Systems

Advanced machine learning models analyze satellite, weather, and seismic data for accurate disaster prediction (e.g., flooding, cyclones, earthquakes), facilitating timely evacuations and preparation. Examples include Google AI for Flood Forecasting; Project Cyclone.

AI-Based Mapping Platforms

Tools like PulseSatellite use AI to rapidly analyze satellite imagery, map disaster-hit regions, and prioritize rescue. PulseSatellite and similar platforms greatly reduce response times and optimize relief deployment.

Optimizing Aid Distribution

AI systems assess real-time data (population needs, accessibility, conflict zones) to ensure efficient delivery of humanitarian supplies, minimizing waste and targeting those most in need. Examples include UN World Food Programme's AI-based distribution modeling; GiveDirectly's satellite AI for cash relief identification.

Population Movement Forecasting

AI platforms like Project Jetson predict refugee flows, improving planning and timely resource mobilization. UNHCR uses AI for mapping

refugee movements and anticipating future camp needs.

AI in Crisis Medicine

AI drives telemedicine, disease surveillance, mental health chatbots, and wearable health monitors in refugee camps and crisis settings. Examples include Children Immunization App (CIMA); UNICEF MERON app for detecting malnutrition.

AI for Disaster Response (AIDR)

Platforms analyze social media in real-time to identify urgent needs, pinpoint affected areas, and guide relief teams during disasters (e.g., Nepal Earthquake response using AIDR). Natural language processing also breaks language barriers and clarifies service needs.

Robotics and Drones

AI-driven robots and drones support search and rescue, damage assessment, and supply delivery in hard-to-reach areas

Ethical and Inclusive Deployment

AI helps monitor fairness, reduce bias, and uphold ethical standards in humanitarian response.

PLANET



Iconic Photo of an Astronaut floating in Space

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Leaving No Region Behind

Seizing the Digital Moment: AI Equity for All

Armela Brocaj, Belgium

The rapid advancement of AI in global development has transformative potential for sustainable development and its different components, as the different Youth Experts of the Body describe in their parts. Research shows that 70% of the United Nations' Sustainable Development Goals (SDGs) could directly benefit from digital technologies¹, like AI. However, despite its potential, AI technologies must center equity to ensure that development is sustainable and widespread for all. The current gaps paint a clear picture: national investments in AI across countries and continents vary significantly, leading to divergences in the development of AI technologies and the effect of their benefits. **Data centers and computing powers are severely underrepresented in low- and middle-income countries**, and the way AI systems are being shaped does not represent the cultural, linguistic and ethnic diversity of our global landscape.

AI equity needs the involvement of local communities that decide how AI can be integrated into their contexts, especially

especially when technical resources are scarce. The UNDP's Local Language Accelerator Program for instance is an example on how local actors are supported to enable large-scale digitization of low resource languages, which appear in less than 0.1% of websites². It shows how AI models can be tailored to local contexts and be the result of co-creation, bridging the AI equity gap.

Additionally, the bias present in machine learning systems is a proven concern. Examples of algorithms reinforcing existing societal inequalities are common. For instance, a recent study by the London School of Economics³ found that AI tools used by more than half of local councils in England for social care assessments consistently downplay women's physical and mental health issues.

Evaluation of AI systems and AI-based decision-making is crucial to recognize and avoid inequities, especially when used in contexts that have direct outcomes.



AI Tools for Equitable Development

AI Blueprints for Inclusive Growth (World Economic Forum)

Strategic frameworks and tools to guide governments and organizations in deploying AI equitably, focusing on infrastructure, skills development, and ethical governance to bridge access gaps

AI-Driven Economic Empowerment Platforms

AI systems that mitigate hiring biases, support workforce inclusion, and provide personalized skill-building to empower marginalized and low-income populations.

Equitable AI in Government Decision Making Tools

GovAI systems designed to allocate public resources and services fairly by embedding fairness, transparency, and accountability mechanisms in government decision platforms.

AI Investment Potential Index (AIPI) by French Development Agency

A tool that identifies countries' AI readiness and investment opportunities to promote inclusive technological growth and sustainable development globally.

Demographically Informed AI Policy Tools

AI applications aligned with national demographic trends (youthful, aging, or transitioning populations), tailored to optimize AI impacts on education, labor markets, and social policies.

AI for Economic Development and Investment Attraction

Platforms that leverage AI to identify investment opportunities, forecast workforce demand, and optimize urban planning, contributing to sustainable regional economic growth.

1. <https://www.sdg-digital.org>

2. <https://www.prospectmagazine.co.uk/ideas/technology/65689/artificial-intelligence-language-translation-twi-ghana> in <https://www.undp.org/digital/blog/every-language-matters-building-more-inclusive-digital-future>

3. Rickman, S. Evaluating gender bias in large language models in long-term care. BMC Med Inform Decis Mak 25, 274 (2025). <https://doi.org/10.1186/s12911-025-03118-0>

Reimagining the Planet with AI Multipolarity

Aristide Kambale, Democratic Republic of Congo

Across the globe, particularly in the Global South, communities are confronting a convergence of crises related to climate change, environmental degradation, displacement, inequality, and fragile governance. These complex, cascading risks are increasingly overwhelming the adaptive capacity of frontline populations and the restoration ability of our planet. In parallel, Artificial Intelligence (AI) is advancing rapidly, reshaping how societies allocate resources, predict shocks, and respond to emergencies. But while AI is often presented as a transformative solution for sustainable development and is becoming a key driver in efforts to restore and protect planetary health, a critical question remains: **Whose resilience is being built, and by whom?**

If used ethically and inclusively, AI can be a powerful enabler of community resilience and planetary sustainability. This is because it can analyse climate patterns to provide early warnings for extreme weather events, but it can also optimise disaster response logistics, guide agriculture for

small farmers, monitor environmental degradation using real-time satellite data. In biodiversity-rich areas like the Congo and the Amazon Basins, AI tools are already helping Indigenous peoples and conservationists track illegal deforestation, advocate for land rights, and protect fragile ecosystems. This not only saves lives but also reduces the long-term socio-economic impacts on vulnerable populations. Therefore, these innovations matter. AI has the potential to enhance anticipatory interventions and bridge the information gaps that have historically hindered frontline communities from accessing support. Importantly, it can elevate local voices by capturing and integrating local knowledge into predictive models and decision support

To realise AI's promise for the planet, we must embrace a multipolar AI ecosystem, one that values distributed innovation, local knowledge systems, and plural governance. In this decisive moment for climate and planetary health, AI should not be a top-down technological fix. It should be a bottom-up catalyst for *resilience*.



AI Tools for Community Resilience

AI-Driven Early Warning Systems

AI analyzes real-time environmental data for early detection and prediction of natural disasters such as wildfires, floods, and storms, enabling timely evacuations and resource mobilization.

Smart Infrastructure and Structural Resilience

AI-powered tools aid engineers in designing, evaluating, and maintaining buildings and urban infrastructure to withstand earthquakes, climate impacts, and other physical stresses.

Climate Resilience and Adaptation Modeling

Integrates satellite data, AI simulations, and local knowledge to forecast climate risks and support adaptive planning in vulnerable communities.

Innovative Construction Technologies

AI-driven robotics, 3D printing, & modular assembly accelerate resilient development.

Community Empowerment via Digital Infrastructure

AI-enabled digital services expand access to education, healthcare, and government services, strengthening societal foundations for resilience.

Workplace and Social Equity Tools

AI platforms analyze workplace dynamics to promote fairness, transparency, and inclusion, strengthening social cohesion and resilience.

Economic and Social Stability Analytics

Advanced analytics monitor economic indicators and social factors in conflict or crisis zones to maintain essential services and inform policy decisions.

Real-Time Data Integration and Decision Support

AI integrates diverse data sources to support agile decision-making by governments, nonprofits, and communities during crises.

Strategic Role of Space in Intelligence Gathering

Diana Kuznetsova, Ukraine

Space-based capabilities and technologies have transformed the context of national security and outer space has become a key arena of intelligence activity in a growing multipolar world. The nature of intelligence collection is shifting as countries like the United States, China and Russia and emergent space-faring nations like India find new resources accessible in space.

From Cold War-era spy satellite projects to the current era of dynamic constellations of high-resolution imaging and signals intelligence (SIGINT) satellites, the development of space intelligence is embedded in the structural transformations of science and technology and the global power balance. These systems have grown from rudimentary overhead surveillance tools into complex, integrated networks that provide near real-time situational awareness and strategic foresight, enabling nations to navigate the complexities of multipolar competition.

Space-based intelligence capabilities allow

states to monitor adversary military movements, track proliferation networks, and detect early warning signs of potential conflicts. But increasing democratization of access to space, the emergence of dual use commercial technologies, as well as increasing numbers of state and non-state actors in space all introduce new elements to the question of strategic stability. Growing militarization and continued over-crowding of space heighten the dangers of miscalculation, jamming and escalation, hence the urgency of developing governance mechanisms, confidence building measures and norms of behavior for transparency, security and responsible conduct by the myriad of external actors that are now active in this contested zone. In addition to the development of these robust space intelligence capabilities, attempts to set norms and rules of behavior in space should also be pursued.

The strategic importance of outer space for intelligence purposes will increase in a multipolar world. Nations need to harness space-based intelligence for *Good*.



AI Tools for Outer Space

AI Autonomous Rovers and Spacecraft Navigation

Mars rovers like NASA's *Perseverance* use AI-driven Terrain-Relative Navigation to autonomously adjust landing and navigate rough terrains without direct human control. Autonomous spacecraft employ reinforcement learning, like the *Deep Q-Networks*, for trajectory optimization and real-time decision-making.

AI Robotic Assistants and Crew Support

NASA's *CIMON* robot acts as a voice controlled assistant on the International Space Station (ISS), helping astronauts with information retrieval and tasks. JAXA's *Int-Ball* robot autonomously captures images and reduces astronauts' workload.

Hazard Detection and Avoidance

AI systems perform obstacle avoidance for lunar and planetary landers, enabling safer touchdowns and surface exploration.

Example: ISRO's *Chandrayaan-3*

Satellite Operations and Data Analysis

AI algorithms analyze vast satellite data for earth observation, space weather monitoring, and planetary research. ESA's *CubeSat* and NASA's *Kepler* missions employed AI to filter clouded images and discover new exoplanets respectively.

Predictive Maintenance for Space Equipment

AI monitors spacecraft and satellite systems to predict failures and schedule maintenance, enhancing mission longevity and safety.

Space Habitat and Life Support Management

AI manages environmental control, resource usage, and habitability conditions in space stations or habitats.

Robotic Repair and Maintenance

AI-enabled robots assist with satellite repair and maintenance tasks that are risky for human astronauts.

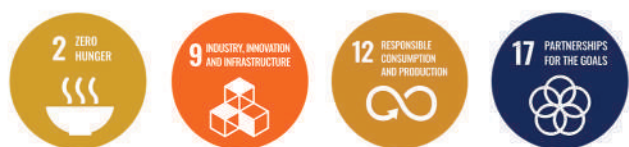
AI Future of Global Supply Chain Resilience

Julien Bazile, Canada

Artificial Intelligence is reshaping the foundations of global supply chain resilience, offering new avenues to anticipate, absorb, and adapt to crises. In an era marked by geopolitical tensions, climate disruptions, pandemics, and technological shifts, supply chains have become more interdependent and more vulnerable. AI holds the potential to act as both a buffer and a transformation driver across multiple resilience dimensions.

First, AI enhances strategic intelligence by enabling real-time sensing of disruptions, predictive modeling of cascading effects, and identification of weak points across complex, multi-tiered networks. For example, during the COVID-19 pandemic, companies like IBM used AI to map supply chain dependencies and forecast shortages in critical medical supplies. This allows firms and governments alike to move from reactive crisis management to anticipatory governance, strengthening their capacity to navigate uncertainty. Second, AI facilitates collaborative interaction among supply chain actors. Through advanced data

sharing platforms AI improves information transparency, accelerates coordination, and helps align incentives across stakeholders. The Port of Rotterdam, for instance, leverages AI and digital twins to optimize port operations, enhance visibility across the logistics chain, and enable joint decision-making between port authorities, shipping companies, and logistics providers. It fosters shared situational awareness, enabling collective problem solving even in fragmented, cross-border supply systems. Third, AI supports organizational adaptation by optimizing internal processes (demand forecasting, production planning, logistics routing) while freeing up human resources for strategic and relational tasks. Companies like DHL have integrated AI into their logistics networks to improve delivery routes, reduce fuel consumption, and react dynamically to disruptions. This technological layer amplifies flexibility and responsiveness in the face of shocks. *True resilience* depends on combining AI tools with human judgment, ethical oversight, and inclusive governance.



AI Tools for Sustainable Supply Chains

Generative AI for Supply Chain Optimization

Real-time data insights predict disruptions and enable AI-driven automation to cut costs and carbon emissions. AI optimizes route planning, demand forecasting, and inventory management to reduce waste and emissions.

AI-Powered Supplier Management

AI evaluates suppliers' sustainability practices, monitors environmental impact, and ensures responsible procurement aligned with ESG and regulatory requirements. Tools like *IBM Food Trust* and *EcoVadis* use AI with blockchain for supply chain transparency and compliance.

Energy Monitoring and Efficiency AI

AI analyzes energy consumption patterns and recommends optimizations for equipment and processes across supply chains to reduce energy usage and carbon footprint.

Lifecycle Analysis Tools

AI platforms perform lifecycle assessments of products, identifying areas to reduce resource use and waste, supporting circular economy and green budgeting practices.

AI in Procurement Decision Support

Simulation tools recommend supplier combinations that optimize cost, efficiency, and lower emissions.

Blockchain with AI for Transparency

Ensures traceability and ethics in sourcing, bolstering trust and accountability through secure data sharing.

AI-Enabled Automation and Error Reduction

Automates repetitive tasks to improve accuracy and free human resources for strategic sustainability efforts.

AI Revolution in Global Finance

Amélie Thouvenot, France

AI's explosive power is reshaping global finance and macroeconomics. Tasks like real-time economic forecasting and financial stability surveillance are increasingly relying on AI tools. In capital markets, generative AI is enabling much faster, more efficient trading and portfolio rebalancing. AI-driven trading is deepening liquidity and improving risk management but it is also driving higher turnover and volatility during stress.

Advanced AI models now parse complex news and reports - e.g. *Federal Reserve minutes* in seconds, accelerating price discovery. Innovative AI-based funds are already showing much higher turnover than traditional funds, suggesting greater market depth. In banking and credit markets, AI is improving risk modeling and capital allocation. AI can now automate credit risk models and loan underwriting, making lending decisions more efficient. Machine-learning algorithms are sifting alternative data to expand credit access to underserved borrowers, while insurers and banks use AI to tailor risk-based pricing.

Importantly, Central Banks are using AI internally for supervisory analysis, and the European Central Bank now scrapes millions of online prices to support real-time inflation tracking and data classification as per the International Monetary Fund.¹

On the side of macroeconomic policy, AI is accelerating the digitization of monetary infrastructure. Central banks collaborate on projects like *BIS's Project Spectrum*, which applies generative AI to categorize billions of transaction prices and produce high frequency inflation nowcasts. These innovations turn raw "big data" into instant economic indicators, potentially improving policy responsiveness. Likewise, CBDC (central bank digital currency) schemes are being piloted by over 98% of world central banks, reflecting a drive to modernize interbank payment and settlement systems.

AI is transforming global finance by improving risk forecasts, deepening markets and liquidity, and enabling more precise policy signals.



AI Tools for Finance and Economy

BERT, FinBERT, GPT-style LLMs

Natural Language Processing tools are being used to process financial news, central bank communications, and earnings reports in real time. Example: AI models trained to interpret Federal Reserve statements or ECB speeches for market sentiment analysis.

Deep learning

Machine Learning and Deep Learning helps in time-series forecasting, including stock price prediction, inflation nowcasting, and macroeconomic modeling.

Central Bank Digital Currency (CBDC) Infrastructure

AI integrated into payment system monitoring, fraud prevention & transaction analysis. BIS projects - e.g., *Project Rosalind*, *Project Atlas*, combine AI with blockchain and distributed ledgers to optimize settlement and oversight.

Swarm & Agent-Based AI

Used in market simulations and stress testing. Central banks and the WEF highlight multi-agent AI systems for modeling network contagion effects in crises.

Robotic Process Automation (RPA) + AI

Automates back-office processes: compliance checks, KYC (Know Your Customer), AML (Anti-Money Laundering) monitoring. Enhanced with machine learning for anomaly detection.

BloombergGPT

LLM models are applied to economic research, financial reporting & automated advisory services.

Fintech AI

Banking and customer service AI chatbots and virtual assistants like Kasisto (KAI), Cognitivescale, Clara by Goldman Sachs.

AI in the Newsroom

Luisa Taranto, Brazil

Accuracy, fairness, accountability, and transparency are core pillars of journalism and also the very standards that make Artificial Intelligence not yet fully trustworthy for integration into our daily lives. This contradiction turns the use of AI in newsrooms into a double-edged sword.

However, history shows that technological progress is unstoppable once it gains global traction. As a result, newsrooms around the world have gradually begun incorporating AI tools into the news production process.

Fact Gathering

For centuries, news stories have emerged through the tireless observation and networking of journalists. Whether analyzing government documents, visiting police stations or attending political hearings, anything could become a source for a good story. But with the rise of the internet, newspapers & broadcasters lost significant share of their funding to social media. At the same time, they were pressured to produce more content to drive traffic to their websites and social platforms.

Fact Checking

In just a few years, AI has taken mis- and disinformation to unprecedented levels. As fake news spreads rapidly across social platforms, journalists must act quickly to debunk it. Yet the same tech companies that create tools capable of generating lifelike images and videos have not made verifying them equally easy. Because AI-generated visuals are created from scratch, rather than altered, there are no references to cross check, making validation much harder.

News Distribution

Over the last decade, social media has deepened the credibility crisis of traditional media. More people now get their information from WhatsApp, Telegram, and biased blogs. AI tools can help by analyzing target audiences & crafting optimized headlines.

Ethics and Oversight

AI requires close human oversight. Media outlets must provide continuous training to journalists to ensure the *safe, just, and responsible use of Artificial Intelligence in journalism*.



AI Tools for Communication

Colibri.ai and SpeechText.ai

Are speech-to-text, automated translation services that can process countless hours of audio or pages of text to translate, sort, and filter information

Rapidminer and CrowdTangle

AI platforms that track trending topics across social media, helping reporters pinpoint what's worth investigating.

Visualping

Website monitoring AI that alerts journalists to important changes and breaking news on tracked sites, saving research time.

Pinpoint (Google Journalist Studio)

AI-powered research tool that searches large document archives, transcribes audio/video, and helps in investigative reporting.

Djinn (iTromsø newsroom)

AI interface for data journalism that assists with finding, analyzing, and summarizing news stories efficiently.

Rolli Information Tracer

Tracks disinformation spread on social media, verifies sources, and helps journalists combat misinformation quickly.

Klara Indernach (Express.de)

AI-powered digital colleague for content structuring, research, and summarization to improve article quality and speed.

Producer-P (Hearst Newspapers)

Slack-based AI tool assisting journalists in creating headlines, SEO optimization, related links, and notification summaries.

GPT-based Writing Assistants

ChatGPT, DeepSeek can generate drafts, suggest headlines, and streamline content creation while supporting journalists' narrative skills.

AI Fact-Checking Tools

Verify facts, detect fake news, and assess source credibility to maintain reporting accuracy.

AI for Ecological Coexistence: A Multipolar Vision

Mishael Akleker, United Kingdom

Biophilic design is an architectural philosophy that integrates natural systems and patterns into built environments. It has gained global traction as a means to enhance human well-being, ecological sustainability, and resilience in urban contexts. Artificial intelligence (AI) is emerging as a critical enabler of this paradigm, providing computational intelligence to operationalize biophilic principles in ways that are both scientifically rigorous and scalable. Through the lens of Biophilic Design, AI becomes a tool for ecological equilibrium, fostering relationships of care rather than extraction.

Systemic Imbalance and Ecological Breakdown

Today's crises—climate instability, extractive design, and exploitative data economies—reflect broken feedback loops between humanity and nature. These imbalances are not only ethical but structural, embedded in governance, economies, and ecosystems. The question is urgent: can AI help us shift from dissonance to coherence?

Equilibrium as a Design Ethic

Equilibrium is the balance that underpins ecosystems and resilient communities.

Guided by biophilic principles, AI can:

- (1) Map and optimize resource flows
- (2) Enable circular, regenerative farming systems
- (3) Monitor land use within planetary boundaries.

Designing for Harmony: Human and More-than-Human Intelligence

Harmony invites us to design AI that serves the commons—what I call *bio-civic AI*. This includes participatory models where indigenous knowledge, community-driven data, and ecological intelligence shape decision-making. In this role, AI listens,, weaving fragmented systems into dialogos.

Governance to Stewardship Framework

We must evolve from command-and-control governance to custodianship rooted in systemic integrity. AI can support real-time ecological feedback, ethical simulations, and transparent decision-making.

Toward Ecological Coexistence

AI is not an external fixer but a participant in life's unfolding balance. The choice before us is clear: *align AI with life, or risk repeating the very patterns of extraction it could help transform.*



AI Tools for Ecological Coexistence

Autodesk Generative Design & Forma

AI-driven engines that simulate & optimize architectural forms under constraints such as environmental performance, daylight, and material usage for biophilic outcomes. Forma's site analysis and 3D sketching capabilities enhance iterative planning in green-integrated architecture.

Rhino + Grasshopper with AI Plugins

Parametric design coupled with generative AI allows biomimetic façade and spatial layout exploration aligned with natural patterns and ecological constraints.

AI Simulation of Visual Comfort

Deep learning systems analyze biophilic features such as plant placement, lighting, and color schemes to predict human visual comfort before construction, guiding optimal layout and material decisions.

Project Bernini (Autodesk)

Experimental AI that produces 3D models from text or images.

Stable Diffusion + LoRA for Biophilic Façades

AI-enabled image generation techniques like Stable Diffusion, fine-tuned with low-rank adaptation, create richly detailed biophilic façade designs tailored for specific populations, such as senior housing environments in South Korea.

Beautimeter, GPT-based Tool

A generative pre-trained transformer that evaluates architectural and urban aesthetics through the lens of biophilic principles, gauging how well structures embody concepts of living structure—informing design refinement for emotional resonance.

Layout2Rendering (Deep Learning for Greenspace Design)

Parks and landscapes can be AI-generated based on existing spatial conditions. The system translates semantic site analysis into vectorized 3D models, enabling real-time landscape layout optimization.

AI enabled Disaster Risk Reduction

Sirine El Halabi, Lebanon

Artificial intelligence (AI) is increasingly central to global strategies for Disaster Risk Reduction (DRR), offering new predictive, analytical, and decision-support capacities that surpass traditional risk management tools. By integrating multi source data: satellite imagery, seismic sensors, climate models, and social media streams, AI enables the anticipation, mitigation, and rapid response to hazards with unprecedented precision.

Japan has emerged as a global leader in deploying AI for DRR, reflecting its historical exposure to earthquakes, tsunamis, and typhoons. The Japanese Meteorological Agency, in collaboration with research institutes, has pioneered the use of machine learning algorithms for **real-time seismic forecasting and tsunami early warning**. For example, AI-enhanced models now assimilate high-frequency GPS and offshore buoy data to refine tsunami predictions within minutes of an undersea quake, reducing false alarms and enabling faster evacuations. Similarly, AI-driven hazard mapping in Tokyo employs convolutional

neural networks to predict building collapse probabilities, guiding urban resilience planning.

Globally, organizations such as the United Nations Office for Disaster Risk Reduction (UNDRR) and the World Bank's Global Facility for Disaster Reduction & Recovery (GFDRR) have adopted AI platforms for multi-hazard risk analytics. AI-based catastrophe models integrate climatic projections with demographic infrastructural data to identify vulnerability hotspots. This is particularly transformative for developing countries where risk data is scarce. AI's capacity to extrapolate from incomplete datasets allows for tailored resilience strategies at relatively low cost.

AI is not merely an adjunct but a transformative enabler of disaster resilience. By coupling predictive accuracy with actionable insights, it redefines preparedness and response. Technological sophistication, embedded in cultural and institutional commitment, can guide global pathways to safer, more resilient societies.



AI Tools for Disaster Risk Reduction

Japan Meteorological Agency's AI Tsunami model

Hazard Detection & Early Warning machine learning forecasting models. Earthquake aftershock prediction, tsunami early warning, flood forecasting.

NASA's Fire Information for Resource Management System (FIRMS)

Remote Sensing & Satellite Imagery Analysis for landslide detection, wildfire monitoring, storm tracking.

Tokyo's AI driven Seismic Hazard Mapping

Risk Mapping & Vulnerability Assessment for predicting building collapse, urban vulnerability modeling.

Geospatial AI GFDRR (World Bank)

GeoAI for integrating terrain data, climate projections, and population density.

UNOSAT

AI-augmented rapid disaster mapping.

Google's Flood Forecasting AI in South Asia

Machine Learning Forecasting Model using data from random forests, gradient boosting, recurrent neural networks (RNNs), LSTMs.

AI systems used by UN OCHA

Crisis Monitoring & Early Action using Natural Language Processing (NLP) for Social Media & Sensor Data to Detect earthquakes, floods, or wildfires from citizen reports and IoT streams.

AI logistics platforms tested in Japan and EU Humanitarian Missions

Disaster Response & Recovery through AI for supply chain & logistics optimization using routing aid deliveries, optimizing evacuation with reinforcement learning and evolutionary algorithms.

UNHCR Translation AIs

Speech & Translation AI for multilingual disaster communication and coordination.

AI Revolution in Culture

Cansu Türk, Türkiye

Artificial Intelligence (AI) is transforming the safeguarding of intangible traditions, like *endangered languages*. UNESCO has highlighted AI's role in analyzing and translating oral heritage. For example, AI-generated translations of Moroccan proverbs showed high fidelity and global reach. Further, by standardizing scripts and creating digital fonts/keyboards for dozens of minority languages, projects like this enable machine translation & speech technologies for languages previously unsupported by AI. Such efforts, linked to *UNESCO's International Decade of Indigenous Languages*, build the datasets and tools (text corpora, TTS voices, corpuses) needed to keep diverse linguistic heritage living in the digital age.

Digitally Restoring Cultural Artifacts and Monuments

AI-driven photogrammetry & 3D modeling enable preservation of at-risk sites. Google Arts & Culture's Open Heritage (with CyArk) has scanned dozens of endangered monuments (like Mexico's cathedral) into VR-ready models, allowing 3D printing

and virtual tours that supplement physical restoration. Similarly, EU-funded projects use machine learning to reconstruct original art. The Horizon Europe "PERCEIVE" project, for example, develops AI tools to recover faded colors in paintings and frescoes (from Edvard Munch's *The Scream* to Renaissance murals).

UNESCO notes that AI-based analysis of materials (patterns, pigments, textures) can guide conservators in digitally restoring artifacts, while automated digitization and archiving of records make heritage collections accessible worldwide.

Enhancing Accessibility and Education with Immersive AI

AI and extended reality are revolutionizing cultural engagement. Museum experts report that AI-powered chatbots, virtual assistants and recommender systems now offer personalized, multilingual museum tours and exhibit narratives. These tools add dynamic audio descriptions & ambient sound making heritage more engaging and accessible to global audiences.



AI Tools for Culture

UNESCO-backed “Missing Scripts”

The project encode under-represented writing systems so they can be processed digitally.

Google Arts & Culture’s Open Heritage (with CyArk)

AI-driven photogrammetry & 3D modeling has scanned dozens of endangered monuments (like Mexico’s cathedral) into VR-ready models enabling preservation of at-risk sites.

Horizon Europe PERCEIVE project

develops AI tools to recover faded colors in paintings and frescoes (from Edvard Munch’s The Scream to Renaissance murals).

EU’s SHIFT Audio Toolkit

Produces high-quality, emotion-rich text-to-speech in many languages, voice-clones of historical figures, and AI-crafted soundscapes.

UNESCO Digital Heritage projects

Automated Digitization & Metadata Tagging (OCR with ML, NLP for cataloguing, computer vision for image tagging) to classify archives.

Blockchain + AI for Provenance

Pilot projects by UNESCO and EU that tracks authenticity and provenance of digital cultural assets and NFTs.

Europeana, Wikidata + AI

Knowledge Graphs & Semantic AI that links cultural datasets across museums, galleries, and national archives.

“Pure Land” Buddhist AR experience or Glasgow’s “Museums in the Metaverse”

AR/VR with AI Content Curation (Unity + AI, Unreal Engine with ML plugins) that powers interactive cultural reconstructions.

Leaving No Region Behind

Natacha Tsivery, Madagascar

Artificial Intelligence is increasingly seen as a key enabler of sustainable development. From monitoring deforestation to forecasting extreme weather, AI promises to transform how we respond to ecological crises. Yet this promise remains *unequally distributed*.

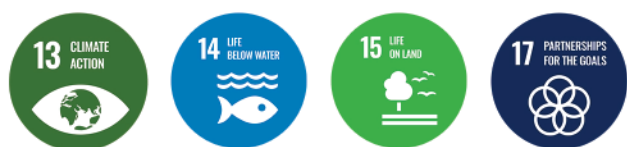
Vast regions of the Global South, especially Africa and South America, are deprived of the foundational data infrastructure needed for meaningful engagement in AI. This deepening divide raises an uncomfortable question: *can AI truly serve the planet if large parts of the world remain excluded from shaping/benefiting from its evolution?*

According to the ITU, only 5% of Africa's AI talent has access to the computing power needed to build or use generative AI. Without targeted investment and inclusive governance, the risk is not merely one of exclusion, but of **dependency**, where climate-vulnerable countries rely on tools, data, and decisions generated elsewhere, often with limited relevance to their local realities or contexts.

Extractive dynamics add to the troubling situation, with countries in the Global South providing essential raw materials such as cobalt and rare earth minerals that fuel AI systems globally; but unable to reap benefits of investment, technology transfer, or local value creation.

To ensure AI promotes environmental resilience and planetary justice, it must be governed as a shared public good, rather than as a tool that reinforces digital divides. Equally more women participation in AI and environmental science is needed.

The African Union's Digital Transformation Strategy (2020–2030) and UNESCO's Recommendation on the Ethics of Artificial Intelligence offer concrete frameworks to align AI with the broader goals of sustainability, equity, and human dignity. But turning these visions into reality requires political will, financing, and concrete efforts, keeping in mind that the strategic use of AI for climate goals often hides a paradox: *the tools designed to fight climate change may themselves be intensifying it.*



AI Tools for Climate Change

MapBiomas (Brazil)

uses satellite imagery and machine learning to monitor land use changes and deforestation in real time.

AI for Climate Innovation Factory 2025

Platform supporting innovative AI solutions for carbon reduction, clean energy transition, sustainable agriculture, biodiversity conservation, and inclusive environmental action, showcased at COP30.

Green Hydrogen by Protium Solutions

The company uses AI to optimize energy consumption, enhances renewable energy systems and reduce greenhouse gas emissions through real-time data analysis.

U.S. - Japan Flood Resilience Project

The predictive AI models help forecast floods, droughts, and other climate impacts, enabling targeted investments in resilient infrastructure and resource management.

IceNet and Google FloodHub

These AI tools provide early warnings and assist policymakers with climate impact assessments and strategy evaluations.

Machine Learning in Emission Monitoring

AI-powered analytics monitor industrial emissions, identify hotspots, and support carbon accounting and environmental compliance.

Resource Conservation AI

AI improves crop yields, water conservation, and promotes regenerative farming practices contributing to food security and ecosystem health.

AI for Urban and Environmental Resilience

AI strengthens urban resilience planning by identifying infrastructure vulnerabilities and promoting sustainable water use, biodiversity and land restoration.

Conclusion

AI in a Multipolar World

AI in a multipolar world will shape the future of cooperation. Artificial Intelligence has become a defining arena of competition, with the United States, China, and the European Union each advancing distinct models of innovation and governance. While this diversity reflects different political, economic, and social contexts, it also risks creating fragmented approaches that deepen divides. Multipolarity, however, need not mean disorder. If managed through dialogue and mutual recognition, it can foster pluralism and enrich global governance by embedding a wider range of perspectives and values.

Multipolarity offers both risks and opportunities. The challenge for policymakers is to ensure that rivalry does not undermine cooperation, and that shared norms emerge despite differences

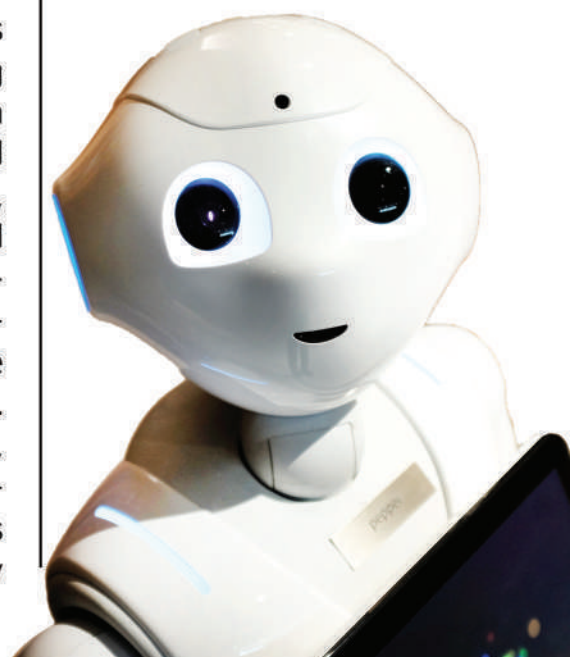
in scale, strategy, and speed. Building trust across poles will be critical, not only for managing competition but for addressing common challenges such as peace, security, and climate resilience— that no single pole can resolve alone.

Tackling the Emerging AI Divide

Tackling the AI divide is essential to securing a digital future for all. The benefits of AI remain concentrated in a handful of countries and companies, leaving many others dependent on external technologies and standards. Access to data, infrastructure, and skilled talent is unequally distributed, creating sharp disparities in who can participate in shaping AI's trajectory. Without corrective action, the AI divide risks replicating patterns of inequalities that already exist in reality between & within societies.

Securing a New Digital Future for All

Securing a new digital future for all requires deliberate investment and inclusion. Bridging the divide means expanding connectivity, financing digital infrastructure, and building human capital at scale. It also means ensuring that international governance frameworks give voice to all regions, particularly those traditionally excluded from decision making.



Can we put the AI Genie back in the bottle?

The AI genie cannot be put back in the bottle in the Age of AI. Unlike past technologies that could be contained or slowed, AI is advancing too quickly and is too deeply embedded to reverse. Attempts to halt its spread are neither practical nor desirable, given its potential to contribute to health, sustainability, and knowledge. *The question is not whether AI can be stopped, but how it can be steered.*

The task is of stewardship, not control. Policymakers, industries, and societies must build mechanisms to guide AI's development toward dignity, peace, and sustainability. This means strengthening oversight, embedding ethics into design, and ensuring benefits are broadly shared. The choices made now will determine whether AI accelerates division or

advances human progress. In the end, the measure of progress will not be which pole leads in capability, but whether humanity leads AI with purpose.

In the Age of AI

This report is a global reflection of voices from thirty countries, showing that multipolarity need not be a fracture but can be harnessed as a strength guiding *AI for People, Peace, and Planet.*

As the United Nations marks its 80th anniversary, the message of this report is clear: in a fragmented world, the test of our collective wisdom is to ensure that AI unites rather than divides.

It is more important now than ever that we need to trust other humans more than we trust AI.

ARTIFICIAL INTELLIGENCE

A program that can sense, reason, act and adapt

MACHINE LEARNING

Algorithms whose performance improves as they are exposed to more data over time

DEEP LEARNING

Subsets of machine learning in which multilayered neural networks learn from vast amounts of data

