Forum: The Legal Committee (GA6)

Issue: Exploring the Legal and Ethical Implications of Rapid Artificial Intelligence Development

Name: Keon Ho Kim, Asha Lock

Position: Head Chair and Deputy Chair of the Sixth General Assembly

Introduction:

In recent years, there has been a great surge in the development of Artificial Intelligence (AI) and the subsequent exposure of AI tools to the public. In the short amount of time AI has been acknowledged in the mainstream, its impacts were widespread and shocking to most. We have seen chatbots interacting with users as if they are humans, AI creating art and music, and AI pioneering facial recognition technology. This is only a small sample of the seemingly limitless capabilities of AI. However, with the rapid development of AI, the legal and social implications have not been deeply considered.

The biggest challenge AI development is facing is the undefined regulations regarding AI usage. No country or organisation in the world is yet to officially pass a comprehensive set of laws that explicitly handle the regulation of AI usage. This is due to AI being a relatively new piece of technology, thus states have insufficient knowledge and understanding of AI. Countries such as the USA, which fully embraces AI, and have been the leading pioneers of AI development, also have no official laws. The widespread use of AI makes it difficult to compile a set of laws that is applicable to all of its uses. Though certain states have started to work and pass laws around AI, it is still in the beginning stages. Without setting international laws and guidelines, using a powerful tool such as AI may lead to security breaches and transparency issues.

Another issue that needs to be addressed is the ethical and moral development and usage of AI. Although explicitly outlining what is ethical is not realistic, there has to be a set of guidelines that dictates what is malpractice of AI. Certain examples and areas that should be considered are issues such as taking credit for an artwork that was solely created using AI, or delving into to what extent AI should be allowed to be developed in order to prevent

certain jobs from being fully automated. Developers and stakeholders of firms have a responsibility in deciding in which ways AI should be used in the field.

The rapid growth of AI usage has led to both innovation and challenges. The vague and unclear legal and ethical implications of AI prevent states from fully embracing it as a tool to assist governments. Therefore, the exploration of the legal and ethical implications of AI is essential for the sustainable development and use of this technology.

Definition of Key Terms:

1. **Artificial Intelligence (AI):** There are many definitions of AI, however, according to the UN, it is the ability of machines and systems to acquire and apply knowledge and to carry out intelligent behaviour.

   a. **Artificial Narrow Intelligence (ANI), or Narrow AI:** Also known as 'weak' AI, a programme designed to perform simple, singular and goal-oriented tasks, such as analysing data, playing chess or predicting the weather

   b. **Artificial General Intelligence (AGI), or General AI:** Also known as 'strong' AI, a hypothetical intelligence agent that has the same or exceeding capabilities as a human or animal. It is currently an unsolved problem and does not exist yet.

   c. **Generative AI:** Type of AI that can generate texts, images or media in response to a prompt (e.g ChatGPT)

2. **Expert System:** a computer system designed to reproduce human 'expert' decision-making in order to solve complex problems

3. **Cybersecurity:** The collection of tools, policies, actions, training, and best practices in order to protect the cyber environment of any user's assets. environment and organisation and user's assets.

4. **Intellectual Property:** A creation or piece of work which one can trademark, copyright, or apply for a patent.

5. **Human Rights:** Rights inherent to all human beings regardless of race, sex, nationality, ethnicity, language, religion, or any other status. In the digital age, where our world revolves around technology, it can be seen as a necessity in order to live in today's society.

6. **International Telecommunications Union (ITU):** The ITU is the leading organisation in the research and development of AI governed by the UN.

Background Information

A brief history of artificial intelligence

Human beings have grappled with the idea of machines mimicking human functions and intelligence ever since the first comparison between an engine and the workings of the brain. Philosophers, mathematicians, theologists; all have contributed to the narrative of logical reasoning, and how, if it can exist naturally, it can also exist as a man-made concept. By the end of the 19th century, science fiction writers were theorising what a world would be like with a society coexisting alongside sentient machines, eventually reaching a revolution against humanity and the evolution of AI beyond our capabilities. By 1921, the word 'robot' was introduced by Czech writer Karel Čapek, and by 1929, the first robot built in the East, Gakutensoku by Japanese biologist Makoto Nishimura.

Most notably, Alan Turing's development of the "Imitation Game" in 1950, published in 'Computing Machinery and Intelligence' and later known as the 'Turing Test' marked the beginning of the modern approach to AI. The test measures the degree to which a machine can mimic human intelligence. Following the test, the first AI programming language was designed by John Mcarthy in the 1960s, the first expert systems designed in the 1970s and 1980s, and finally the data-driven approach made available in the 1990s.

AI nowadays is used in language processing, medicinal research, financial services, transportation and more. The increased quantities of data available has meant that AI can learn and adapt, rather than perform only as well as they were programmed to. Nevertheless, all existing AI still requires human input to be created and maintained, as well as ethical boundaries that evolve as AI does.

Militaristic use of AI

With the development of AI, states were not hesitant to utilise it to strengthen their

militaristic power. AI is often used in facial recognition, strategy planning, automated weapons and manufacturing weapons. These functions help reduce the need for manual labour in the military and also increases their efficiency.

In the forefront of this area of development in the US, which have already initiated

and makes use of projects utilising AI. For example, Project Maeven uses machine learning to analyse and interpret footage to quickly identify threats and targets. Other than the US, countries such as Russia and South Korea have been developing automated defence systems. Russia has been building an AI powered missile defence, capable of efficiently detecting and interpreting the movement of missiles, while Korea has already deployed an AI powered century gun along the DMZ, assisting in detecting threats.

Though AI may enhance the military of many states, the ethical usage of AI

weaponry is at question (see *Libya)*. There is yet to be an outline for AI in the military and therefore it has become a point of concern for some states. However, Canada in 2018 co-founded the International Panel on Artificial Intelligence, placing it as the leader of ethical integration of AI. Within this it outlines the government's commitment to measurable and transparent AI use by trained government employees. Yet, there is a clear absence of the ethical use of AI in the military, and thus makes it difficult to build a legal framework without an established guideline.

AI in politics

'The use of AI in politics' is a phrase people commonly associate with deep fakes,

inhumane decision making, privacy risks, etc. And, while in many cases this is true, AI can also be used to transform and benefit the political stage. Advances in digital technology will allow politicians to better communicate with the general public and make information more accessible, especially in terms of translation or text-to-speech functions. In terms of campaigning, AI can be used in data-driven decision making, allowing politicians to make more informed decisions based on the predicted impacts of prospective politics. Finally, AI can be enacted to detect voter fraud and the mass spread of fake news.

On the other hand, AI in politics raises many ethical concerns, both for the future and

in present situations. For example, in mainland China, Huawei and Megvii collaborated to develop and validate the use of facial recognition to trigger 'Uyghur alarms'. The technology, first tested in 2018, can be used to detect an individuals' age, ethnicity and apparent sex, but was adapted specifically to detect members of the Uyghurs minority, and alert police of their location. Not only is this a prime example of targeted profiling, but the technology also provides a basis for widespread and effective AI discrimination. Countries such as Russia, Iran and Saudi Arabia have been accused of similar criticism.

Additionally, AI, although it can be used to facilitate discussions on social media, it can also be used for extensive censorship and the spreading of misinformation on online platforms. For example, multiple AI-based censorship systems were recently detected in Iran. However, it should be noted that an AI algorithm was used to detect this system in the first place, and is actively looking for ways to prevent its workings. Therefore, it can be argued that AI in politics is entirely relative to the respective governments definitions of what 'ethical' AI really is.

Timeline of major events

1950	Release of the 'Imitation Game'
1955	John Mcarthy coins the term 'Artificial Intelligence'
1956	Dartmouth Summer Research Project, largely considered the founding of AI as a field
1958	The Defense Advanced Research Projects Agency (DARPA) founded, research and development facility for use of emerging technology in the US military. One example of a project was the introduction of digital, interactive, street mapping.
1964-66	Production of the ELIZA programme by Joseph Weizenbaum. It is able to have a conversation with a person in English
1972	The expert system MYCIN developed in Stanford University as an early form of a computerised patient diagnosis programme.
1997	Deep Blue, a chess-playing AI, beats the world champion, Garry Kasparov.
2000s	Google's Web Page Index reaches one billion pages in two years, after reaching 26 million pages in the 1990s.
2006	AI@50 (The Dartmouth Artificial Intelligence Conference: The Next 50 Years)

2009	Waymo builds the first driverless car
2016	Major advancements in healthcare AI, with some systems having more accurate diagnoses than human doctors
2020	First apparent use of lethal autonomous weapons in Libya
2022	Chat GPT was released for public use in November

Current Situation

Upcoming events

UK conference

As announced on 10 June, the UK will be hosting the first major summit on

AI safety in autumn this year, with the aim of identifying and bringing together like-minded countries and allies. Its purpose is to mitigate the risks of AI, mainly through "internationally coordinated action", as well as "provide a platform for countries to work together" (Gov.UK). Work will build upon the G7 common approach to the situation as agreed during the Hiroshima Summit in May, as well as discussions from the OECD and Global Partnership on AI.

Ongoing conference series'

NeurIPS 2023 will be held in New Orleans. The conference focuses on the

interdisciplinary approach to neural information processing, and is primarily information exchange. Although the conference itself has no political power, many government representatives attend and engage with discussions, which often feature the implications of AI ethics, fairness and policy implications.

Additionally, AI and the Future of Work (July 2023) serves as a platform for

policymakers to discuss the implications of AI from an employment and economic perspective, while other conferences, such as the AI Ethics, Policy, and Governance (AIEthics) Conference focuses specifically on the ethical and political aspects of AI. It should be noted that many conferences are workshop and discussion based, and, despite attempts, may not always result in the creation of laws or governmental guidelines.

Current ethical concerns

In recent years, social media and online campaigns have continued to contribute to raising awareness surrounding AI, including both its technical advantages and potential harms. Developments by both major and minor tech companies have also ensured AI is available to any member of the public with access to a laptop, bringing the AI debate to the foreground. Some of the most controversial elements of AI include:

(1) Employment

Currently, AI and machines are more suited to labour-heavy but not cognitively demanding work, such as self-driving trucks or assembly lines. Although this may allow for more people to spend time on non-labour based tasks, such as quality time with family, it will also transform many industries. The transition from human-based cheap labour, to expensive AI will be difficult, but will hopefully create as many, if not more, jobs as it replaces.

(2) Wealth inequality

The job displacement that comes with AI assimilation into the labour market is also likely to exacerbate the wealth disparity. With companies favouring the machine over the human workforce, "how exactly will we distribute wealth created by machines?" (weforum.org) Overall, AI-driven companies will make more money than human-driven, again going back to that idea of structuring a transitional economy.

(3) Autonomy and responsibility

Despite being rigorously tested, AI programmed for medical diagnosis, education, linguistics, etc, is not always perfect. What happens when a self-driving car crashes? Or a court case is evaluated incorrectly? Or a tumour is misdiagnosed? This begs the primary question, who is responsible for the failures of AI: the programme, the manufacturer or the human supervisor?

Additionally, AI is not inherently neutral. They are just as susceptible to bias as the people that designed them, which includes stereotypes, gender bias, racial discrimination, and other forms of prejudice. For example, an AI software used by Amazon, designed to filter through resumes and detect the most qualified candidates, inadvertently discriminated against women. It had been programmed from a biassed data set with primarily men, so it was less likely to choose a female candidate. A similar situation occurred with a healthcare programme, which

exhibited racial bias, as observed by a study published in *Science* (Obermeyer 2019). The programme, designed to highlight high-risk patients in need of extra attention, had been based on data from predominantly white patients, and was less likely to identify eligible black patients. It had been used on over 200 million people in the US before the problem was flagged.

Other ethical concerns include the extent to which robots are humane, if we, as humans, should protect 'robot rights', the regulation of autonomous weapons for military AI and privacy risks due to AI's "data-hungry nature" (medium.com)

Major Parties Involved and Their Views

The International Telecommunication Union (ITU)

The ITU is the leading global organisation in promoting AI. Its deep knowledge of AI makes it the forefront of promoting the benefits of AI. They support the sustainable and responsible use of AI on both daily and governmental levels. Through their platform *AI for Good*, they aim to educate people on the ways in which they can ethically use AI, hoping to achieve AI's full potential.

USA

The US is the leading country in the world in AI investment and has been for the last few years, investing $43 billion in 2022 alone, clearly supporting AI. The US uses AI in areas such as military, intelligence, and law enforcement to help mitigate potential threats. The USA possesses the biggest tech companies that develop and create AI models such as Microsoft's ChatGPT. Although the US is leading the world in AI investment, there is little government regulation on AI. The Algorithmic Accountability Act of 2022 attempted to provide a baseline for AI production transparency and regulations, however further action is still required. Being the leading country in AI, it holds massive power in the direction AI is being used and possesses responsibility in forming international guidelines in the usage of AI. As of now there are no major statements about the regulation of AI, therefore it is suspected that they have no imminent plans of imposing laws.

Microsoft

As mentioned above, Microsoft is the leading tech company in the world developing and researching AI. It aims to use AI to further improve their services, but also to create

programmes for the general public such as *ChatGPT*. However, these tools have raised issues in countries such as China and Italy, which banned Microsoft's chatbot due to security breach speculations. Despite this, Microsoft continues to invest heavily on AI, providing *OpenAI* with $13 billion.

Through AI, Microsoft aims to amplify human ingenuity with intelligent technology. It attempts to develop a trustworthy and secure AI, ensuring it is accessible to all, regardless of their technological knowledge. Therefore, Microsoft is a key stakeholder in the ethical use of AI and sustainably integrating this technology in everyday life.

Japan

Japan mainly focuses on robotics and the use of AI in medicine and industry, while overseas markets prioritise AI software. This has meant that Japan is falling behind on creating new generative AI and models.

However, according to Nomura Research Institute, by the year 2035, half of all jobs in Japan could be performed by AI robots. The social principles of Japan's AI sector, as defined in 2019, are human dignity, diversity and inclusion, and sustainability, to be realised through the production of modern and innovative AI. Therefore, regulations do not restrain development, but rather protect the rights of parties involved.

China

In China, AI innovation is rapidly catching up to the standards set by the USA. Chinese researchers are publishing more papers than US researchers, with almost as many active firms. There is a definite focus on speech and image recognition and synthesis, more so than other nations, with the economic incentive allowing for market diversity and opportunities. However, policies focus on promoting AI, which is not matched with strong regulations, apart from providing a framework for manufacturers to follow. Nevertheless, China's AI investment is predicted to reach approximately US$26.7 billion by 2026, about 8.9% of the global total.

Libya

As previously established, Libya became the first government to have apparently

used fully autonomous weapons in warfare. In March 2020, as outlined in the UN report, a self-driving Turkish-made STM Kargu-2 drone was used by a group of militia fighters in the Libyan Civil War. It is not confirmed whether the drone killed anyone, however it was programmed to function without human interference. From an ethical perspective, the situation raises concerns regarding future conflicts and how they may look.

Russia

Russia's main concerns with AI include increasing control over information, combatting Western-dominated AI developers, and continuing with AI innovation. Russian research and innovation is ongoing, such as with the ChatGPTs Russian equivalent, GigaChat. However the war in Ukraine has prevented substantial development, especially due to the imposed Western tech sanctions. For example, intense computing power, which powerful AI requires, is in short supply in Russia, and is considerably slowing down Russian models. Furthermore, the IT-specific 'brain drain' following the outbreak of war has also limited the country's brainpower, preventing major milestones while the war eats up Russia's resources. That being said, the Russia-Ukraine war has also become a testing ground for new AI from both Russia and Ukraine and its allies, including geolocation with social media data analysis, autonomous and semi-autonomous drones, and decoding information.

UN Involvement, Relevant Resolutions, Treaties and Events

AI for Good

AI for Good is a programme and platform run by the ITU that promotes AI and its potential uses. It also hosts various talks, seminars, events and summits, uniting the various stakeholders including states, NGOs, individuals and other relevant parties. The variety of activities all assist in promoting the positive uses of AI through showcasing how it can aid in achieving the SDGs. The platform keeps the public informed about how every committee and partner organisations are addressing AI. Through AI for Good, it fosters discussions and knowledge sharing, which lead to the implementation of ethical and responsible usage of AI and the deployment of AI in states that align with human rights and transparency principles.

Recommendation on the Ethics of Artificial Intelligence (SHS/BIO/REC-AIETHICS/2021)

This is the first official agreement between all states about the usage of AI. The recommendation well encapsulates all the issues AI brings forth, and considers ways in which all states could address this issue. However, with it being a recommendation and not a full resolution, some of the suggestions are vague and may not be applicable to all states. Although it may not be feasible, it is definitely a strong basis for establishing international guidelines, as it portrays the potential of all states coming to a consensus regarding AI. The recommendation may be used as a basis on developing a full resolution.

Possible Solutions

- Strengthen IP laws to encompass AI generated creations, ensuring copyright protection
    - Explicitly outline the rights of the AI developer, user and other involved parties
    - For example, copyright should go to the AI programme and the AI developer when cited as a source, however ownership can go to the user as it was their input/data that created the work.
    - Would be similar to an extension of the Digital Millennium Copyright Act (DMCA) in the United States
- Require AI developers to provide documentation of AI systems
    - Include reasons for data collection and how it is used
    - Create legal repercussions for those systems that collect more data than the presented documentation/any systems that exceed the set limits
    - Extension of the European Union's General Data Protection Regulation (GDPR), which advocate for collecting only necessary data for specific purposes, ensure it applies to as many member nations as possible
    - Require AI systems to make decisions intelligible to humans
- Formation of a regulatory body for any state that utilises AI in their governmental system that would do the following:
    - Oversee the use in AI in government and research firms
    - Conduct regular audits to ensure that the level of safety is consistent with the decided standards

- ○ Have the authority to enforce transparency requirements, even in governmental bodies
- Requiring the adaptation of labour laws to:
  - ○ Include AI in various industries that enhances human labour rather than replaces it, such as by restricting AI's accessibility to certain occupations
  - ○ Develop criteria that define the boundaries of AI, such as when AI may be deemed 'harmful', or what AI can be used in what industry
- Increase restrictions or regulations on AI in the healthcare sector, for example by:
  - ○ Creating a Medical Practise Law where all diagnosis-assisting AI must pass a medical exam, similar to what medicine students also must participate in
  - ○ Ensuring all medical AI is documented, including any errors, with legal repercussions when standards are not up to date
  - ○ Increasing international cooperation, mitigating systems and risk assessments to guarantee all input data is high quality and lacking in bias
  - ○ Preventing development of AI by singular parties to further discourage the implementation of human prejudice into neutral systems

Bibliography

Useful Links

- [Artificial Intelligence | Office of the Secretary-General's Envoy on Technology](#)
- [AI for Good](#)
- [United Nations Activities on Artificial Intelligence (AI)](#)
- [Artificial Intelligence](#)
- [Recommendation on the Ethics of Artificial Intelligence (UNESCO)](#)

Works Cited

- [Artificial Intelligence | Office of the Secretary-General's Envoy on Technology](#)
- [AI for Good](#)
- [United Nations Activities on Artificial Intelligence (AI)](#)
- [Artificial Intelligence](#)
- [Recommendation on the Ethics of Artificial Intelligence (UNESCO)](#)

- [Possible Solutions For The Top 5 AI Challenges We Are Already Facing | by Jan Marcel Kezmann](#)
- [Top 9 ethical issues in artificial intelligence | World Economic Forum](#)
- [Will robots and AI cause mass unemployment? Not necessarily, but they do bring other threats | United Nations](#)
- [AI and its Impacts on Privacy and Security | by Fintelics](#).
- [Artificial Intelligence Timeline - Military Embedded Systems](#)
- [How China Seeks to Regulate Generative AI](#)
- [Huawei tested AI software that could recognize Uighur minorities and alert police, report says - The Washington Post](#)