

Committee: **Special Committee**

Topic: **The question of the ethics of artificial intelligence**



"Buying a Robot." *SoftBank Robotics*, 19 Oct. 2017,

Committee:	SPC
Issue:	The question of the ethics of artificial intelligence
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Position:	Chair and Deputy Secretary-General

Introduction

With the rise of artificial intelligence worldwide, our global conversation is now extending into how this tool can be used to benefit all of humanity. Socially, economically, and politically, artificial intelligence has not only become an inseparable component of our daily lives, but is in fact, a powerful force that is expediting the process of globalization. For more economically developed countries (MEDCs) and less economically developed countries (LEDCs) alike, artificial intelligence is a field where scientists and researchers are constantly exploring for the purpose of extending its application across various sectors.

However, many argue that there is a limit to what we can achieve with artificial intelligence before it becomes dangerous for us humans. Despite the good intentions of the developers of AI, the technology may evolve to become autonomous which would result in devastating consequences. Robots may also replace humans in work resulting in a mass unemployment. Robots may steal as many as 800 million jobs in the next 13 years.¹ People fear that due to the hackable nature of the

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“Robots May Steal As Many As 800 Million Jobs in the Next 13 Years.” *Fortune*, Fortune

digitalized world, AI may pose a large security threat in nations. These are legitimate ethical concerns that must not be overlooked. Together we must find a way to recognize the benefits of artificial intelligence in our society while mitigating the negative impacts. We want to define a framework for AI.

Definition of Key Terms

Artificial Intelligence:

Artificial intelligence is a category of computer science that focuses on creating intelligent machines. The core problems of artificial intelligence include programming computers for certain traits such as: knowledge, reasoning, problem-solving, learning, planning, and ability to manipulate and move objects. Knowledge engineering is the crux of AI research. Machines can often act and react like humans only if they have sufficient data relating to the world. Thus, artificial intelligence must have a connection to objects, categories, properties and relations between all of them to implement knowledge engineering. There are 3 types of AI: **Artificial Narrow Intelligence (ANI)**, which deals with weak AI that specializes in one area, **Artificial General Intelligence (AGI)**, which refers to a computer which is as smart as a human and can perform any intellectual task that a human can do, and **Artificial Superintelligence (ASI)**, a computer that is more intelligent than the brain in every field. The AI Revolution is the road from ANI, through AGI, to ASI.

Machine Learning:

Machine Learning is a current application of AI based around the idea that we should be able to give machines access to data and let them learn for themselves.

Ethics:

Ethics is a system of moral principles. It is concerned with the benefit of individuals and society. They are basically rules about right and wrong.

General Overview

Our world is evolving; artificial intelligence is no longer seen as pure science fiction but as a commodity in our everyday lives. In fact, in 2017, the first artificial human was made a citizen in Saudi Arabia. At a global scale, AI is seen to be a critical aspect of “monitoring, discovering, predicting and interpreting the overwhelming quantities of information essential for harnessing the data revolution.” This can be beneficial for global development and societal change, for instance by contributing to the fulfillment of the United Nations Sustainable Development Goals, it also raises legal, ethical and societal concerns and challenges, some of which may be hazardous for human well-being, safety, and security. However, the rapidly evolving nature of AI makes it difficult for both national and international laws to keep up. As has been the case in other periods of intense change, the lag in the evolution of laws and regulations can lead to significant policy gaps. This makes it difficult for ethical guidelines to be established for the development of AI.

While the scenario of robots dominating the world may seem farfetched, last year, over 100 robotics and artificial intelligence technology leaders, including Elon Musk and Google's Deep Mind co-founder Mustafa Suleyman, issued a warning about the risks posed by super-intelligent machines. In an open letter to the UN Convention on Certain Conventional Weapons, the signatories said that once developed, killer robots - weapons designed to operate autonomously on the battlefield - “will permit armed conflict to be fought at a scale greater than ever, and at timescales faster than humans can comprehend. The letter states: “These can be weapons of terror, weapons that despots and terrorists use against innocent populations, and weapons hacked to behave in undesirable ways. We do not have long to act. Once this Pandora’s box is opened, it will be hard to close.”²”

Partially autonomous and intelligent systems have been used in military technology since at least the Second World War, but advances in machine learning represent a turning point in the use of automation in warfare. Though the United States military and intelligence communities are planning for expanded use of AI across their portfolios, many of the most transformative applications of AI have not yet been addressed. Existing machine learning technology could enable high degrees of automation in labor-intensive activities such as satellite imagery analysis and cyber defense, but can also be used to infiltrate other nations. Advances in AI will affect national security by driving change in three areas: military superiority, information superiority, and economic superiority by allowing new and existing technologies to be more affordable and making the collection and analysis of data more efficient.

In 2015, the UN general assembly held the session “Rising to the Challenges of International Security and the Emergence of Artificial Intelligence” to better manage the use of AI in the future. Some other challenges that arise as a result of the development of AI include discrimination unemployment. China’s

² Smith, Rob. “5 Core Principles to Keep AI Ethical.” *World Economic Forum*

Foxconn Technology Group, which supplies Apple and Samsung, has announced it aims to replace 60,000 factory workers with robots.

In 2018, Facebook, Amazon, and other large technology companies were hit with a lawsuit because of age discrimination presumably caused by the company's use of AI to target advertisements. The lawsuit revolves around Facebook's unique business model, which lets advertisers micro-target the network's users based on their interests, city, age, and other demographics and even private information. In the past, equal rights advocates have sued Facebook for accepting ads that discriminate against consumers based on their religion, race, and gender. This may be at a smaller scale than the potential use of AI as super soldiers, however, discrimination and privacy is still an important consideration when discussing the use of AI in everyday life. AI should not be used to diminish data rights and use personal information to discriminate against individuals.

While the prospects of IA may be ethically questionable we must also recognize how they help in our daily lives. In Tokyo, AI is used to help people navigate through busy train stations without a language barrier. Self-driving cars have the potential to eradicate drunk driving accidents. The world uses artificial intelligence every day and while there may be some risks, they also provide many benefits to society.

Major Parties Involved

China

China has become one of the leading global hubs for AI development. China's success in AI has been partly fueled by the government's overall investment in scientific research at its universities. Out of all countries in the world, China publishes the most AI research and have started employing the

technologies in big companies such as Baidu and Alibaba. The past few years, the Chinese government spending on research has grown by double digits each year. Funding of science and technology research continues to be a major priority, as outlined by the last Five-Year Plan. They even started employing robot teaching assistants in nursery schools. Nearly 19,000 scientists and technicians were actively involved in artificial intelligence research last year, and the number is predicted to continue to rise. It is suspected that the Chinese army have started AI-related projects which will strengthen the defense industry.

United Kingdom

On the 27th of June, 2017, the UK government House of Lords AI select committee published a report “to consider the economic, ethical and social implications of advances in artificial intelligence.”³

Central to the report are five core principles designed to guide and inform the ethical use of AI. The first principle argues that AI should be developed for the common good and benefit of humanity. The second principle demands that AI operates within parameters of intelligibility and fairness, and calls for companies and organizations to improve the intelligibility of their AI systems. Third, the report says artificial intelligence should not be used to diminish the data rights or privacy of individuals, families or communities. They stated “Large companies which have control over vast quantities of data must be prevented from becoming overly powerful within this landscape. We call on governments ... to review proactively the use and potential monopolization of data by big technology companies operating in the UK.” The fourth principle stipulates all people should have the right to be educated as well as be enabled to flourish mentally, emotionally and economically alongside artificial intelligence. Fifth, and aligning with concerns around killer robots, the report says the autonomous power to hurt, destroy or deceive human beings should never be vested in artificial intelligence.

³ “AI in the UK: Ready, Willing and Able?” *Publications.parliament.uk*

United States

The USA is currently the leading nation for use of artificial intelligence with China being a close second. The US Government's investment in AI has grown by over 40% since 2015. The Trump administration is currently enabling the creation of new technological industries in America by removing regulatory barriers in AI-development although this also the ethical guidelines. National security recognizes the need for the USA to lead in AI development leading the the department of defense investing in such technologies. On June 27, Deputy Defense Secretary Patrick Shanahan issued a memorandum that formally established the Defense Department's new Joint Artificial Intelligence Center (JAIC) whose overarching aim is to accelerate the delivery of AI-enabled capabilities, scale the impact of AI tools, and synchronize the department's AI efforts. The 2018 National Defense Strategy foresees that AI will likely change the character of war; stating the United States "must pursue AI applications with boldness and alacrity."⁴

Russia

Russia's intention is to make 30% of the country's military equipment robotic by 2025. The country's intelligence departments have already leveraged machine learning and algorithms to project pro-Russia messaging into foreign media markets.

⁴ *Establishment of the Joint Artificial Intelligence Center.*
https://admin.govexec.com/media/establishment_of_the_joint_artificial_intelligence_center_osd008412-18_r....pdf

Timeline of Key Events

As AI is such a rapidly developing field, there are many key events. Here are just the most important ones.

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| 1956 | The term artificial intelligence was coined at Dartmouth University in hopes that AI might give USA the upper hand in the cold war. |
| 2004 | Space rovers Spirit and Opportunity by NASA autonomously navigated Mars' surface |
| 2015 | UN general assembly held the session "Rising to the Challenges of International Security and the Emergence of Artificial Intelligence" |
| 2017 | First AI made a citizen of a country (Saudi Arabia) |
| 2017 | Hawking, Musk, Wozniak + 3000 researchers in the artificial intelligence and robotics field wrote an open letter to ban the development and use of autonomous weapons |

Possible Solutions

The only possible solution is finding a way to mitigate the negative effects of AI without hindering the growth of it as well as the positive effects of AI. New jobs can be created in the technology sector to replace those lost to AI, robots must be programmed carefully and meticulously to lessen the chances of discrimination and security breaches, and UN guidelines should be implemented for the use of AI in warfare. These are just examples but there are many more creative alternatives, which we will be debating in this committee.

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