

ILSAMUN 2024

U N A I C

UNITED NATIONS
ARTIFICIAL INTELLIGENCE COMMITTEE

SEIZING THE OPPORTUNITIES OF
SAFE, SECURE AND TRUSTWORTHY
ARTIFICIAL INTELLIGENCE SYSTEMS
FOR SUSTAINABLE DEVELOPMENT



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LETTER FROM SECRETARY-GENERAL

I salute you on behalf of the ILSA Model United Nations Team of 2024 which shall be the fourth annual edition of ILSAMUN as its Secretary-General. It's utmost pleasure to lead a team which struggle to gather up a Model United Nations Conference that we all hope and with great determination schedule to be an intellectual gathering of minds that wish nothing but to become more sharpened rather than just a usual Model United Nations Conference.

Through relentless efforts, our aim has been to craft an enriching experience marked by intellectual exchange, robust debates, and indelible memories. It is a privilege to see this vision come to fruition with a team of dedicated individuals eagerly awaiting your arrival.

I truly believe that the Model United Nations Conferences shall be nothing but serve you to demonstrate the dynamics of the world with a different perspective, provide a chance to expand your knowledge and awareness on the matters. Without you, our efforts would be meaningless. Therefore I invite you to find the common ground and generate the sustainable solutions with your enthusiastic and active participation.

Finally, I as the Secretary-General of ILSAMUN, hereby welcome you all to this beginning of an unforgettable experience. I'm no one but the person who is looking forward to meet you for your valuable contributions.

Sincerely,
ÖMER FARUK CAN

General Information: United Nations (UN) and United Nations Artificial Intelligence Committee (UNAIC)

I. Historical Background

The United Nations (UN), a world organisation created under the leadership of the major powers that won the Second World War, was established to prevent the recurrence of wars and threats to peace in the first half of the 20th century and to protect international peace and security.

The UN Charter, which is the founding treaty of the UN, was signed by 50 countries in San Francisco on June 26, 1945. Later, with Poland signing the Charter, the number of founding member states increased to 51. The UN Organization officially became operational on 24 October 1945, as stipulated in the UN Charter, when the majority of the UN member states, including the five permanent members of the UN Security Council (UNSC), completed the ratification procedures of the Charter. Since this date, 24 October has been celebrated as UN Day every year.

The main organs of the United Nations are the General Assembly, the Security Council (UNSC), the Economic and Social Council (ECOSOC), the Trusteeship Council, the International Court of Justice and the UN Secretariat. Today, the United Nations has 193 member countries. The aims of the UN are to prevent wars and threats to peace, to establish friendly relations between countries and to ensure international economic and social cooperation (Republic of Türkiye Ministry of Foreign Affairs, n.d.).

II. Current Aim

This committee has not yet been established in the United Nations, but this committee will be established soon because negotiations on this issue are continuing. The main purpose of this upcoming committee is to reaffirm that artificial intelligence will be created and used through the lens of humanity and dignity, safety and security, human rights and fundamental freedoms. The committee's goals include bridging the digital divide within and between nations and using this technology to advance common priorities around sustainable development (United Nations, 2024).

III. Sustainable Development Goals & Millennium Development Goals

The United Nations approved the Sustainable Development Goals (SDGs), also known as the Global Goals, in 2015 as a global call to action to eradicate poverty, safeguard the environment, and ensure that by 2030, all people live in peace and flourish.

The 17 SDGs are interconnected, recognizing that actions in one area have an impact on results in others, and that development must strike a balance between social, economic, and environmental sustainability. Countries have pledged to prioritize improvement for those who are far behind. The SDGs are intended to eradicate poverty, hunger, AIDS, and discrimination against women and girls. The creativity, know-how, technology, and financial resources of the entire society are required to realize the SDGs in every situation (*Sustainable Development Goals*, n.d.).

Sustainable Development Goal 9 and 8 are what we are focusing on since the UNAIC's main goals are essentially SDG 8 and 9. Goal 8 and 9's main aim is to build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation. Goal 9 is explained further in the following points:

- 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.
- 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead.
- 9.1 Develop quality, reliable, sustainable, and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
- 9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise the industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.

- 9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.
- 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
- 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
- 9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological, and technical support to African countries, least developed countries, landlocked developing countries, and small island developing States.
- 9.b Support domestic technology development, research, and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities 20/35 Transforming our world: the 2030 Agenda for Sustainable Development A/RES/70/1.
- 9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least-developed countries by 2020 (GA Resolution, 2015).

The 17 Sustainable Development Goals and 169 goals that are set today illustrate the scope and ambition of this new global agenda. They intend to expand on the Millennium Development Goals and fulfill what they did not accomplish. They strive for universal human rights, gender equality, and the empowerment of all women and girls. They are interwoven and indivisible, balancing the three components of sustainable development: economic, social, and environmental.

The UN acknowledges the Millennium Declaration as the ultimate foundation for collective action. The Organization believes that competitive and ecologically sustainable sectors play an important role in speeding economic growth, alleviating poverty, and achieving the Millennium Development Goals (MDGs). While industrial growth has a significant impact on the attainment of all MDGs, the Organization focuses on numerous issues, however, we will just be addressing the following for our agenda:

MGD 8: Global Partnership for Development

Target 8.F:

In cooperation with the private sector, make available benefits of new technologies, especially information and communications. Globalisation has emerged as the dominant feature of the world economy and is bound to retain this pre-eminence in the coming years. For some time, trade has been recognized as a central element in industrial development strategies. However, the liberalisation of investment and trade regimes on their own do not ensure that much of the developing world benefits from global markets and achieves rapid economic growth. The MDG 8 on global partnership contains the important target of developing an open, rule-based, predictable and non-discriminatory trading system. For MDG 8, UNIDO's response is to actively foster value-addition, diversification of production away from heavy reliance on commodities, and promote capacity-building to meet the technical and business requirements of participation in trade. UNIDO works in partnership with other organisations, such as the World Trade Organization (WTO), to address the problem of nontariff barriers through its trade-capacity building and Aid for Trade activities. In this way, it also helps partner countries to take advantage of the global trading system ("UNIDO & MDG," 2010).



Seizing the Opportunities of Safe, Secure and Trustworthy Artificial Intelligence Systems for Sustainable Development

I. Introduction

The 21st century is a period in which technological innovations are rapidly developing and artificial intelligence (AI) is playing an active role in various fields around the world. Artificial intelligence technology has led to radical changes in many areas, from daily life to the defence industry, the business world, from education to the healthcare sector. However, these technological advances also bring challenges in ethical, security and social issues. The right address to solve such global challenges is the UN, because the United Nations (UN) is an international organisation established with the goals of ensuring global peace and security, protecting human rights and promoting sustainable development. The UN plays an important role in creating a global framework to support the benefits that AI brings to society while minimising negative impacts. In this process, the aim of the UN is to take advantage of the opportunities of safe, secure and reliable artificial intelligence systems for sustainable development.

II. Definitions of Key Terms

Artificial Intelligence (AI)

Artificial intelligence means equipping computers or machines with human-like reasoning, learning, problem-solving, perception and decision-making abilities. Artificial intelligence includes technologies such as machine learning (ML), deep learning, and natural language processing (NLP).

Ethics

Ethics refers to a set of principles used to determine the difference between right and wrong behaviour. Ethics in the context of AI ensures that AI systems are fair, transparent and trustworthy, and requires that they comply with human rights.

Data Privacy

Data privacy is about protecting personal privacy when collecting, storing and using personal information. With the development of AI technologies, data privacy is an important issue in protecting the rights of individuals.

Autonomous Systems

Autonomous systems are artificial intelligence-based machines and devices that can perform certain tasks without human intervention. Today, ethical issues, especially in the military use of autonomous systems, are a matter of serious debate.

Global Governance

Global governance is the set of institutions, rules and norms for addressing international problems and ensuring transnational cooperation. Due to the global implications of AI, the UN plays a leading role in global governance.

Responsible AI

Responsible AI is a framework used to ensure the ethical and safe development and implementation of artificial intelligence systems. Some governments encourage responsible AI practices to ensure that AI does not harm society.

III. History of AI

A Basic Timeline

The term Artificial intelligence was first coined by John McCarthy in 1956, at the Dartmouth Summer Research Project on Artificial Intelligence Workshop. But the journey to understand if machines can truly think began much before that. In Vannevar Bush's seminal work *As We May Think* (1945) he proposed a system which amplifies people's own knowledge and understanding. Five years later Alan Turing, a young British polymath who explored the mathematical possibility of artificial intelligence, wrote a paper named *Computing Machinery and Intelligence* on the notion of machines being able to simulate human beings and the ability to do intelligent things, and how to test their intelligence, of what is known as the *Turing Test* to the general public.

In the next 20 years after Dartmouth Workshop, the developments of the programs was, to most people, simply "astonishing". Computers were solving algebra word problems, proving theorems in geometry and learning to speak English. These early successes fueled optimism, with some researchers predicting that such "intelligent" behaviour by machines was possible at all, yet These programs were effective at specific tasks but lacked the broad problem-solving abilities of human intelligence. Researchers expressed an intense optimism in private and in print, predicting that a fully intelligent machine would be built in less than 20 years. But most people was disagreeing that the 'true AI' hasn't experienced rapid progress over time. AI types of programs, named Expert Systems, were being used in more subtle ways such as examining purchase histories and influencing marketing decisions. But because of this indirect usage of AI, most people started to think the true AI was not yet in the picture. The common theme in the field has been to overestimate the difficulty of foundational problems. In addition, there was a tendency to redefine what 'intelligent' meant after machines have mastered an area or problem. This so-called 'AI Effect' contributed to the downfall of mostly US-based AI research in 1980's (University of Washington, Department of Computer Science & Engineering, 2006).

In the 70's, the AI industry entered a period of time described as *AI Winter*. During the AI winter, commercial and scientific activities in AI declined dramatically. The reasons for that were researchers reaching the limits of the computer's powers at that time and some other programmatic problems. These problems caused lack of progress and the companies and governments who funded these researches decided to cut off almost all funding for undirected research into AI. Because of that, during AI winter, AI research programs had to disguise themselves under different names in order to continue receiving funding. The re-branding of these disciplines (such as *Machine Learning, Informatics, Knowledge-based system* etc.) allowed AI to continue to progress in the winter. However, there were less and less perceived advancements under the name of AI which further aggravated the decline in the overall support. The reason for that was, expert systems were programmed to execute orders in one specific topic and it was hard for these programmes to complete other commands, related other than their specific domain (Monahan, J., n.d.).

Despite all the challenges and limitations, the advances made in the winter of AI have greatly helped make AI what it is today. Developments in both artificial intelligence and other fields (both software and hardware) led to an increase in research in the field of artificial intelligence in the 1990s. With increased computing power, more sophisticated algorithms, and access to vast amounts of data, AI has seen a significant leap forward in recent years, impacting various aspects of our lives (Kaplan M. A., & Haenlein M., 2017).

One step before AI: Expert Systems

An expert system is a computer program that uses artificial intelligence (AI) technologies to simulate the judgement and behaviour of a human or an organisation that has expertise and experience in a particular field (Tech Target Search Enterprise AI, n.d.). Expert systems are usually intended to complement, not replace, human experts.

The concept of expert systems was developed in the 1970s by computer scientist Edward Feigenbaum, a computer science professor at Stanford University and founder of Stanford's Knowledge Systems Laboratory. The world was moving from data processing to "knowledge processing," Feigenbaum said in a 1988 manuscript. That meant computers had the potential to do more than basic calculations and were capable of solving complex problems thanks to new processor technology and computer architectures, he explained. About the same time, LIPS, the later dominant programming language in AI and expert systems, was invented by John McCarthy in MIT.

During the 1960s and 1970s, expert systems were increasingly used in industrial applications such as chemical structure analyzer, computer hardware configuration system, medical diagnosis system etc.. By the end of 1980s, over half of the Fortune 500 companies were involved in either developing or maintaining expert systems. Companies like DEC, TI, IBM, Xerox and HP; and universities such as MIT, Stanford, Carnegie-Mellon, Rutgers and others all took part in pursuing expert system technology and developing practical applications. Today, expert systems have expanded into many sectors of our society and can be found in a broad spectrum of areas (Russell, S. J., & Norvig, P., 2021).

IV. AI Today

Artificial Intelligence is the process of building intelligent machines from vast volumes of data. Systems learn from past learning and experiences and perform human-like tasks. It enhances the speed, precision, and effectiveness of human efforts. AI uses complex algorithms and methods to build machines that can make decisions on their own. This technology has created opportunities to progress on real-world problems concerning health, education, and the environment.

Types of Artificial Intelligence

I. Based on Capabilities

Narrow AI (Weak AI)

- This type of AI is designed to perform a narrow task (e.g., facial recognition, internet searches, or driving a car). Most current AI systems, including those that can play complex games like chess and Go, fall under this category. They operate under a limited pre-defined range or set of contexts.

General AI (Strong AI)

- A type of AI endowed with broad human-like cognitive capabilities, enabling it to tackle new and unfamiliar tasks autonomously. Such a robust AI framework possesses the capacity to discern, assimilate, and utilize its intelligence to resolve any challenge without needing human guidance.

Super Intelligent AI

- This represents a future form of AI where machines could surpass human intelligence across all fields, including creativity, general wisdom, and problem-solving. Superintelligence is speculative and not yet realised.

II. Based on Functionalities

Reactive Machines

- These AI systems do not store memories or past experiences for future actions. They analyze and respond to different situations. IBM's Deep Blue, which beat Garry Kasparov at chess, is an example.

Limited Memory

- These AI systems can make informed and improved decisions by studying the past data they have collected. Most present-day AI applications, from chatbots and virtual assistants to self-driving cars, fall into this category.

Theory of Mind

- This is a more advanced type of AI that researchers are still working on. It would entail understanding and remembering emotions, beliefs, needs, and depending on those, making decisions. This type requires the machine to understand humans truly.

Self-aware AI

- This represents the future of AI, where machines will have their own consciousness, sentience, and self-awareness. This type of AI is still theoretical and would be capable of understanding and possessing emotions, which could lead them to form beliefs and desires.

III. Based on Technologies

Machine Learning (ML)

- AI systems capable of self-improvement through experience, without direct programming. They concentrate on creating software that can independently learn by accessing and utilizing data.

Deep Learning

- A subset of ML involving many layers of neural networks. It is used for learning from large amounts of data and is the technology behind voice control in consumer devices, image recognition, and many other applications.

Natural Language Processing (NLP)

- This AI technology enables machines to understand and interpret human language. It's used in chatbots, translation services, and sentiment analysis applications.

Robotics

- This field involves designing, constructing, operating, and using robots and computer systems for controlling them, sensory feedback, and information processing.

Computer Vision

- This technology allows machines to interpret the world visually, and it's used in various applications such as medical image analysis, surveillance, and manufacturing.

Expert Systems

- These AI systems answer questions and solve problems in a specific domain of expertise using rule-based systems.

Where is this AI?

AI is commonly used, where any kind of exchange of information is essential. The fields artificial intelligence mostly used are (Simplilearn., n.d.):

- **Healthcare:** In the health sector, artificial intelligence is used in diagnosing diseases, interpreting analyses and listing personalised medicines.

- Finance: Prevention of frauds, preparation of personalised financial recommendation lists can be shown as examples of the use of artificial intelligence in the financial field.
- Retailing and E-commerce: Personalised recommendation lists and advertising (as used in sites such as Instagram, Amazon, etc.), chatbots created by companies to contribute to customer service (such as Vodafone Tobi)
- Manufacturing: Controlling errors in production systems, improving and increasing production, and robotic automation are some of the areas where artificial intelligence is used in the production sector.
- Transportation: Programmes for self-driving cars (such as the famous car brand Tesla), navigation, transport improvement and traffic control.

The investments

Artificial intelligence, even as a theme, has attracted a lot of attention and interest since the day it was introduced. Many companies and governments have invested heavily in AI research since its early days.

I. Investments made by governments

1. United States: The US is currently conducting its research on artificial intelligence through DARPA (Dennis, M. A., 2022). The Defense Advanced Research Projects Agency (DARPA) is a research and development agency of the United States Department of Defense responsible for the development of emerging technologies for use by the military. DARPA is now investing more than \$2 billion in the next generation of AI through its initiative, AI Next (DARPA, 2021).

2. European Union: Horizon Europe is the EU's key funding programme for research and innovation (European Commission, 2021). In Horizon 2020, the EU decided to allocate investments for AI's innovation and research (European Commission, 2023).

3. China: The Cyberspace In July 2017, China's State Council released the New Generation Artificial Intelligence Development Plan (NGAIDP).⁸ NGAIDP outlines a series of key initiatives to turn China into the world leader in AI by 2030. NGAIDP builds on a framework of earlier national strategies to dominate technology fields, most famously Made in China 2025, Internet+, and the 13th Five-Year Plan (Carter, W. A., & Crumpler, W. D., 2019).

It should be also mentioned that every government has their own AI Strategies that cannot be mentioned here specifically. For more resources over this part, please look up for the part "Bibliography". To find what you are looking for in the bibliography, look for the APA style reference in the relevant text or in parentheses at the end.

II. Investments made by private companies

1. OpenAI

- OpenAI, founded in 2015, is an AI research and development company based in the United States. The company develops general AI technology to benefit all of humanity. OpenAI began as a nonprofit company and later split into the "cappedprofit" organization OpenAI LP and the parent nonprofit organisation OpenAI Inc. in 2019 (Somoye, 2024).

- OpenAI launched ChatGPT, a generative AI model that utilises deep learning methods to process and produce natural language text, as a prototype on 30 November 2022, it became available to the public on 30 January 2023. The model is trained on vast amounts of text data, enabling it to capture human language patterns, nuances, and complexities (Hines, 2023).
- In its journey so far, ChatGPT has received a lot of criticism but also a lot of additional features. In addition to ChatGPT, artificial intelligence tools such as DALL-E, Sora, etc., also prepared by OpenAI, have made the work of many people easier and at the same time frightening (Roumeliotis & Tselikas, 2023).

2. Google

- Google has acquired London-based artificial intelligence company Deepmind in 2014 to help it compete against other major tech companies as they all try to gain business advantages by focusing on deep learning (Shu, 2014).
- On February 7, 2023, Google officially debuted Bard, its AI technology, with the goal of competing with Open AI's well known ChatGPT-3 language model.
- In May 2023 Google added the new feature Search Generative Experience (SGE) to its website, which integrates into search results a new feature called the "AI snapshot," to provide users with fast and accurate answers to complex questions that would traditionally require the user to conduct multiple Google searches over several hours. Then there's Duet AI, the label for a collection of AI-powered productivity tools across its Workspace apps, including an image generation feature in Google Slides and AI-generated responses to emails in Gmail's "Help me write" mode (Ram, B. & Verma, P., 2023).
- In June 2023 it's revealed that Google DeepMind is developing a system called Gemini that combines the reinforcement learning used in AlphaGo with LLMs similar to GPT-4 to give the system new capabilities such as planning and problem-solving (Samadov, 2023).
- In August 2023 Google introduces updates to its Search Generative Experience, all aimed at helping users better learn and understand information they find on the web; this includes testing the inclusion of links directly in the snapshot answers generated, making it easier for users to check the source of the information. The company is also introducing images and video in Search Generative Experience results (Dale, 2024).
- Bard now responds to questions in real time, but it's otherwise pretty quiet on the Google front; we hear that Google plans to release its Gemini AI model as part of a series of next-generation models in 2024 (November 2023) (Google's 'AI Snapshot' And Search Engines | Hype Insight, 2023).

3. Microsoft

- Microsoft is invested \$1 billion in OpenAI to support them building artificial general intelligence (AGI) with widely distributed economic benefits in July 2019 (Brockman, 2019).
- Microsoft announces new supercomputer, lays out vision for future AI work on in May 2020 (Langston, 2020).
- On September 22 2020, Microsoft announced that it would begin exclusively licensing GPT-3, the world's largest language model, built by San Francisco-based OpenAI (Hao, 2020).
- Microsoft says it's extending its long-term partnership with OpenAI through a new "multiyear, multibillion dollar investment." The investment comes just weeks after Microsoft was rumoured to be investing \$10 billion into OpenAI, the creators of popular AI tools like ChatGPT and DALL-E 2 (Capoot, 2023).
- In February 2023 Microsoft launches a new version of its Bing search engine running on a variant of the technology underlying ChatGPT and then adds voice-driven Bing Chat on

Android and iOS.

- In March 2023 the company unveiled Copilot, a new AI-powered tool that sits alongside Microsoft 365 and helps users with generating text in documents, creating PowerPoint presentations and formatting Excel data.

V. Possible Threats

Artificial intelligence, as it is used today, is a fact that cannot be ignored that it brings a lot of problems, despite its recent popularisation and positive usage. Improperly trained AI can cause spreading of misinformation, and even if the producer of the AI will be held liable, the damage would be hard to recover.

Another threat is to cause false propaganda, which can also be caused by misinformation. The results that AI produces depend on how it is designed and what data it uses. Both design and data can be intentionally or unintentionally biased. If not done properly, AI could lead to decisions influenced by data on ethnicity, sex, age when hiring or firing, offering loans, or even in criminal proceedings. It can also present a threat to democracy, which can present financial risks, harm reputation, and challenge decision making. All of this could lead to separation and polarisation in the public sphere and manipulate elections.

Use of AI in the workplace is expected to result in the elimination of a large number of jobs. Though AI is also expected to create and make better jobs, education and training will have a crucial role in preventing long-term unemployment and ensure a skilled workforce.

Alongside with the other safety and security risks there are also other possible threats that humankind should be prepared for. With the rapid progress made in AI, it is evident that AI robots embodied with artificial intelligence will be taking their place in our lives. With our lives depending more and more on AI, it is inevitable that accidents will occur in workplaces due to the presence of these machines. The most concerning of these accidents are those caused by artificial intelligences that have been trained, consciously or unconsciously, to prioritise the safety of machines over that of humans. This is the point of origin of the future scenarios that arouse fear in people (European Parliament, 2023).

VI. Questions to be Answered

- **What strategies should be created so that AI can support the Sustainable Development Goals (SDGs)?**
- **What kind of cooperation mechanisms can be developed to coordinate AI at the international level?**
- **What kinds of policies should be made to offset the impacts of AI on society regarding automation and unemployment?**
- **How should the threats posed by the military use of AI be dealt with?**
- **What should be done to ensure that AI is used for peaceful purposes?**

VII. Bibliography

Brockman, G. (2019, July 22). *Microsoft invests in and partners with OpenAI to support us building beneficial AGI*. OpenAI. <https://openai.com/blog/microsoft-invests-in-and-partners-with-openai>

Capoot, A. (2023, January 23). *Microsoft announces new multibillion-dollar investment in ChatGPT-maker OpenAI*. CNBC. <https://www.cnbc.com/2023/01/23/microsoft-announces-multibillion-dollar-investment-in-chatgpt-maker-openai.html>

Carter, W. A., & Crumpler, W. D. (2019). China's National Strategy for AI. In *Smart Money on Chinese Advances in AI* (pp. 4–6). Center for Strategic and International Studies (CSIS). <http://www.jstor.org/stable/resrep22599.7>

Dale, R. (2024). A year's a long time in generative AI. *Natural Language Engineering*, 30(1), 201–213. doi:10.1017/S1351324923000554 <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/6C2F1E711842A2427F854BA5BC4514C7/S1351324923000554a.pdf/a-years-a-long-time-in-generative-ai.pdf>

DARPA. (2021, January 26). Defense Advanced Research Projects Agency. <https://www.darpa.mil/about-us/about-darpa>

Dennis, Michael Aaron (2022, December 23). "Defense Advanced Research Projects Agency | United States government". *Encyclopædia Britannica*.

European Commission. (2021, December 9). *Explanatory Memorandum*. Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on improving working conditions in platform work. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021PC0762>

European Commission. (2023). *Research and Artificial Intelligence*. European Research Executive Agency. https://rea.ec.europa.eu/research-and-artificial-intelligence_en#europes-approach-to-ai

European Parliament. (2023, June 20). *Artificial intelligence: threats and opportunities | Topics | European Parliament*. Topics | European Parliament. <https://www.europarl.europa.eu/topics/en/article/20200918STO87404/artificial-intelligence-threats-and-opportunities>

Fouse, S., Cross, S., & Lapin, Z. (2020). DARPA's impact on artificial intelligence. *AI Magazine*, 41(2), 3-8. <https://ojs.aaai.org/aimagazine/index.php/aimagazine/article/view/5294>

GA Resolution. (2015). General Assembly 2015 Resolution. <https://undocs.org/Home/Mobile?FinalSymbol=A%2FRES%2F70%2F1&Language=E&DeviceType=Desktop&LangRequested=False>

Google's 'AI Snapshot' And Search Engines | Hype Insight. (2023, May 29). Hype insight. <https://hypeinsight.com/how-googles-ai-snapshot-is-taking-over-search/>

H. Lin, (2023), "Standing on the Shoulders of AI Giants" in *Computer*, vol. 56, no. 01, pp. 97-101,doi: 10.1109/MC.2022.3218176 <https://doi.ieeecomputersociety.org/10.1109/MC.2022.3218176>

Hao, K. (2020, September 23). *OpenAI is giving Microsoft exclusive access to its GPT-3 language model*. MIT Technology Review. <https://www.technologyreview.com/2020/09/23/1008729/openai-is-giving-microsoft-exclusive-access-to-its-gpt-3-language-model/>

Hines, K. (2023, June 4). *History Of ChatGPT: A Timeline Of The Meteoric Rise Of Generative AI Chatbots*. Search Engine Journal. <https://www.searchenginejournal.com/history-of-chatgpt-timeline/488370/#close>

International Business Machines Corporation (IBM). (2023, August 29). Understanding the different types of artificial intelligence. IBM Blogs. <https://www.ibm.com/blog/understanding-the-different-types-of-artificial-intelligence/>

Kaplan M. A., & Haenlein M. (2017). History of Artificial Intelligence. <https://hbsp.harvard.edu/product/CMR711-PDF-ENG>

Langston, J. (2020, May 19). *Microsoft announces new supercomputer, lays out vision for future AI work - Source*. Source. <https://news.microsoft.com/source/features/ai/openai-azure-supercomputer/>

Mannuru, N. R. & Shahriar, S. & Teel, Z. A. & Wang, T. & Lund, B. & Tijani, S. & Pohboon, C. & Agbaji, D. & Alhassan, J. & Galley, J. & Kousari, R. & Oladapo, L. & Saurav, S. & Srivastava, A. & Tummuru, S. & Uppala, S. & Vaidya, P. (2023). Artificial intelligence in developing countries: The impact of generative artificial intelligence (AI) technologies for development. *Information Development*. 10.1177/02666669231200628.

Monahan, J. (n.d.). *Finding the Needle in the Haystack: CMU Students Develop AI Tool to Improve the Usability of Government Reports*. Carnegie Mellon University's Heinz College. <https://www.heinz.cmu.edu/media/2024/February/finding-the-needle-in-the-haystack-cmu-students-develop-ai-tool-to-improve-the-usability-of-government-reports>

Ram, B. & Verma, P. (February 15, 2023). Artificial intelligence AI-based Chatbot Study of ChatGPT, Google AI Bard and Baidu AI. *World Journal of Advanced Engineering Technology and Sciences*, 2023, 08(01), 258–261 <https://doi.org/10.30574/wjaets.2023.8.1.0045>,

Republic of Türkiye Ministry of Foreign Affairs. (n.d.). *Birleşmiş Milletler Teşkilatı ve Türkiye / T.C. Dışişleri Bakanlığı*. <https://www.mfa.gov.tr/birlesmis-milletler-teskilati-ve-turkiye.tr.mfa>

Roumeliotis KI & Tselikas ND. (2023). ChatGPT and Open-AI Models: A Preliminary Review. *Future Internet*.; 15(6):192. <https://doi.org/10.3390/fi15060192>

Russell, S. J., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson Education Limited.

Samadov, I. (2023, December 8). *The Creation of Google's AI Model: Gemini*. Medium. <https://ismatsamadov.medium.com/the-creation-of-googles-ai-model-gemini-ab9fce1216e1>

Shu, C. (2014, January 27). *Google Acquires Artificial Intelligence Startup DeepMind For More Than \$500M* | TechCrunch. TechCrunch. <https://techcrunch.com/2014/01/26/google-deepmind/>

Simplilearn. (n.d.). Types of Artificial Intelligence That You Should Know in 2024. <https://www.simplilearn.com/what-is-artificial-intelligence-and-why-ai-certification-article>

Simplilearn. (n.d.). 18 Cutting-Edge Artificial Intelligence Applications in 2024. <https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/artificial-intelligence-applications>

Somoye, F. (2024, March 27). *Who created ChatGPT? - and who owns OpenAI?* PC Guide. <https://www.pcguides.com/apps/who-created-chat-gpt/#:~:text=OpenAI%20Chief%20Scientist%20Ilya%20Sutskever%20wrote%20ChatGPT.,software%20engineering%20of%20Chat%20GPT>

Sustainable Development Goals. (n.d.). UNDP. <https://www.undp.org/sustainable-development-goals>

TechTarget SearchEnterpriseAI. (n.d.). Expert system. Retrieved from <https://www.techtarget.com/>

UNIDO & MDG. (2010). In https://www.unido.org/sites/default/files/2010-04/mdgbrochure2_0.pdf.

United Nations. (2024, March 21). *General Assembly adopts landmark resolution on artificial intelligence*. UN News. <https://news.un.org/en/story/2024/03/1147831>

University of Washington, Department of Computer Science & Engineering (2006). History of AI. <https://courses.cs.washington.edu/courses/cse473/23wi/notes/Introduction2023.pdf>