

# HALLMUNC 2024

## CALVERT HALL COLLEGE HIGH SCHOOL MODEL UNITED NATIONS CONFERENCE



**General Assembly: *Future of Artificial Intelligence***

## **Background information**

Artificial intelligence (AI) is the intelligence of machines or software, as opposed to the intelligence of human beings or animals. AI applications include advanced web search engines (e.g., Google Search), recommendation systems (used by YouTube, Amazon, and Netflix), understanding human speech (such as Siri and Alexa, self-driving cars (e.g., Waymo), generative or creative tools (Chat GPT and AI art), and competing at the highest level in strategic games (such as chess and go).

Artificial intelligence, that has emerged as an academic discipline in 1956, went through multiple cycles of unsubstantiated optimism (aka hype)<sup>1</sup> followed by failures and subsequently losing funds in several AI winters. Economists have frequently highlighted the risks of redundancies from AI, and speculated about unemployment if there is no adequate social policy for full employment.

In 2022-2023 software developers have greatly increased the amount of AI available to the public. Examples of this may include but are not limited to Chat GPT, and other chat bots.

Rule-based step-by-step approach that was successful in highly formalized circumstances, such as in solving puzzles or making logical deductions, failed to provide useful results in more probabilistic, real-world circumstances.

Neither methods for dealing with uncertain or incomplete information, such as used in probability and rational-choice economics, nor computation power was available until the late 1980s and 1990s.

Deep learning, especially large language models, has only begun to be possible using faster hardware, such as GPUs in late 2010s and early 2020s, because of both hardware improvements (faster computers, graphics processing units, cloud computing) and access to copious amounts of data (including curated datasets, such as ImageNet and vast textual corpora).

## **A timeline of AI development and technological advancements**

**1<sup>st</sup>** - The first appearance of artificial intelligence was in 1942, when during World War 2 the allies used AI to break the enigma code. The Bombe machine, designed by Alan Turing during World War II, was certainly the turning point in cracking the German communications encoded by the Enigma machine. It helped in speeding up the decoding of messages. Hence, this allowed the allies to react and strategies within a few hours itself rather than waiting for days/weeks.

**2<sup>nd</sup>** - The second main event in AI history was the testing for machine intelligence by Alan Turing, in 1950. Alan Turing was the most renowned computer scientist of the time. The great mathematician had proposed another great experiment to test the intelligence of a machine. The idea was to understand if the machine can think accordingly and make decisions as intelligently as a human being. In the experiment, an interrogator had to figure out which answer belonged to a human, and which was a machine. If the interrogator could not distinguish between the two, the machine would pass the test of being indistinguishable from a human. And most tests the machine had similar but distinguishable answers, cementing that AI has a future.

**3<sup>rd</sup>** - Third we have the father of AI, John McCarthy (1955)

John McCarthy was an American computer scientist who coined the term “artificial intelligence” or “AI.” he revealed his theory at the first Dartmouth AI Conference and theorized that a fully functioning AI machine would be present in 5-5000 years.

**4<sup>th</sup>** - Eliza, the first ever chatbot, an early version of the popular chat gpt, was invented in 1964 by Joseph Weizenbaum. Its purpose was to serve as a psychotherapeutic robot that gives pre-fed responses to the user, making them feel like they are talking to someone who understands their problems.

**5<sup>th</sup>** - The Alice chatbot

In 1995 Richard Wallace released the revolutionary ALICE chatbot, although ELIZA heavily influenced this bot, there were major changes that set ALICE apart. The biggest of these changes was NLP, (Natural language processing), and the program was there to converse with humans algorithmically so that conversations and responses flowed naturally, similar to how a person would talk.

**6<sup>th</sup>** - The next significant leap in AI development was the Roomba AI vacuum that was developed in 2002 using AI pathing technology to vacuum your house for example, without bumping into unnecessary objects, and using its pathing technology to recognize walls, or obstacles and maneuver around them. It uses sensors as well to navigate around furniture, not fall down the stairs, etc. It also can be voice activated using your Amazon Alexa assistant.

**7<sup>th</sup>** - The ability for AI such as Siri, to recognize you by your voice. This was a monumental leap in AI history as you could now talk to your virtual assistant from anywhere in your home, or while on the go if you do not have time to open your phone, and then Siri. Voice recognition was added to iPhone in 2008,

Lastly, Siri comprises a conversational interface, personal context awareness, and service delegation. The user response to Siri has consistently been so positive that it has become a key feature on all Apple devices. A user can ask Siri to call, send a message, or perform other actions with the iPhone, MacBook, and Smart Watch apps.

**8<sup>th</sup>** - the first robot citizen Sophia

Sophia, the first robot citizen was created in 2016 by Hanson Robotics. Sophia can imitate humans' facial expressions, language, speech skills, and opinions on pre-defined topics, and is designed so that she can get smarter over time.

This is a big leap creating a robot that thinks mostly for its own and can communicate fluently in multiple languages.

**And finally** - the one you have all been waiting for Chat GPT

Chat GPT revolutionized the AI world, and some say, reignited the public interest in AI.

Chat GPT was created in 2020 as an open AI chatting platform, however some people use it for much greater activities, GPT can draft essays, give ideas for novels, play games of chess, and even reply to text messages for you. It can also be a companion who you can explain your problems to if you need help, a robot cannot really judge you.

## AI's impact on current Society

AI has been taking over the media lately, AI chat bots, vacuums, Computer programs, even computer run industrial machines. While this is good, AI can be a double-edged sword. AI technologies often collect and analyze substantial amounts of personal data, raising issues related to data privacy and security. To mitigate privacy risks, we must advocate for strict data protection regulations and safe data handling practices. Also, AI can affect the work force, if too many jobs become computerized and outsourced to AI, because you don't have to pay robots, this will positively affect the economy, but how will it affect individual people who have been replaced by an AI. How will this affect the already prevalent poverty? It will make the rich richer, and the poor poorer.

Also, AI is affecting the classroom, AI powered grading, testing, and even lesson plans are already being used in modern society. This also puts many people out of jobs and pay. Finally, Ai is affecting sporting events, Leagues such as the MLB, NFL, and more have already announced plans to add AI umpires and referees to the game.

## Questions to consider / outcomes for the General assembly,

1. Sanctions, in what ways could we limit AI so that the increase in AI technology is beneficial
2. What are some good or bad outcomes from AI,
3. In what ways can AI be used as a weapon, IE cyber-attacks.
4. Should Business leaders participate in the control of AI, or is it all up to the federal GOV of that area or country?
5. Potential future steppingstones regarding AI development
6. How can AI affect the social norms of today?
7. How can AI affect the industrial world and jobs?
8. How will AI affect schools and sports?

## Roles

### • **Business leaders**

- **Elon Musk**
  - Elon musk is a multi-billionaire who founded tesla, space-x, and co-founder of Nueralink and open AI. Elon has made huge strides in the progression of AI with self-driving cars, open AI such as Chat GPT, and other AI software's. Elon uses AI in his electric cars so that, like airplanes and his space-X rocket's, the cars can travel on autopilot for extended periods of time. His nueralink is designed as being able to operate a computer or mobile device, anywhere you go.
- **Mark Zuckerberg**
  - Mark Zuckerberg is the billionaire inventor of Facebook, is a staple in the software engineering and AI development community. Zuckerberg's auxiliary company, Meta is largely AI powered, the Majority of Meta runs on AI systems.
- **Samuel Altman**
  - Sam Altman, also known as Samuel H. Altman, is an American entrepreneur, investor, programmer, and blogger. He has amassed a net worth of \$250 million through his various business ventures. Altman has co-founded multiple companies, serves as the CEO of OpenAI, and was previously the president of Y Combinator.
- **Bill Gates**
  - Bill gates' is the co-founder of tech supergiant and trillion-dollar company, Microsoft. Microsoft was on the forefront of AI research and development for a substantial portion of the 21st century. Bill gates and Microsoft are one of the key funders for the Open AI company. Bill also funds AI working with amazon, such as amazon Alexa.

- **Jeff Bezos**
  - Jeff Bezos is the multi-billionaire owner and founder of Amazon. Amazon seems like a company where you can do online shopping, but behind the scenes, Amazon uses AI to track your shopping and pick Ads accordingly. Also, Amazon has employee-less stores where AI tracks everything you pick up and put down so it can charge your account appropriately. Finally, Amazon created Amazon Alexa, a personal assistant like Siri, its voice activated, and can control multiple facets of your home life, although AI commands.

- **Countries**

- **United States of America**
  - The USA is one of the most technologically advanced civilizations on the planet. The USA fosters almost all the AI technology available in the world including companies like Tesla, Open AI, Amazon, and Microsoft. As the United States the delegate would be President Joe Biden, who is a democrat, with strong opinions on AI especially how it can impact the work force
- **United Kingdom**
  - The UK is also a big contributor to AI as they have been a prime mover for AI companies, as well as a large ally to the United States' AI industry. The delegate for the UK would be the British prime minister, Rishi Sunak. The British government feels positive about AI and is also minorly concerned about its impact on the workforce.
- **France**
  - France is a lesser but still prominent contributor to AI, The French government however has a strong plan for AI, setting aside a budget of 1.5 billion dollars over 5 years (2018-2023) to help the growth of the AI industry. France is also the 2<sup>nd</sup> biggest contributor to AI in the European block. The French delegate would be the president, Emmanuel Macron. Macron believes in global regulation of AI as well as introducing it in as many ways as possible.
- **Spain**
  - Spain is developing their AI at a rapid rate introducing their own algorithmic AI that solves problems like Chat GPT and Open AI. Spain is the #1 contributor to AI in the European block since the UK left the EU in 2020. The Spanish delegate would be the Spanish president, Pedro Sanchez. Sanchez's opinion on AI is that it should be used often and commonly, but still needs to be checked and sanctioned for safety purposes.
- **Brazil**
  - Brazil is a country rather lacking in AI programming and AI powered companies. Due to the low budget for technology in Brazil, and lack of resources available, Brazil is unable to house AI programs and businesses. The Brazilian delegate would be President Luiz Inácio Lula da Silva. Silva's country doesn't have enough resources to contribute greatly to the AI industry, although he feels it would greatly improve the country's industrial side. Possibly bringing some wealth to the impoverished country.
- **United Arab Emirates**
  - The United Arab Emirates or UAE is one of the fastest developing countries in the east. With cities like Dubai popping up, AI fueled industry is a big part of the development and is largely responsible for the economic growth in that area of the world. The Delegate from the UAE is the head of state Mohammed bin Zayed Al Nahyan. His stance on AI is that it is necessary for the development of the world and should be fostered.
- **Egypt**
  - Egypt is a rapidly developing country in northeast Africa boasting the world's 31<sup>st</sup> largest economy. Egypt recently launched the Nation AI strategy to exploit AI technology. This could potentially be dangerous as Egypt is a large weapons supplier for both Russia and the USA. The Egyptian delegate is Abdel Fattah El-Sisi. His stance on AI is that it should be fostered and be used to prop up the economy.
- **Australia**

- Australia is a modern well-developed country located in central Oceania. Australia boasts the 13<sup>th</sup> largest economy in the world. Australia's plan for AI is as follows: “The AI Action Plan is a key feature of the Australian Government's Digital Economy Strategy. The Digital Economy Strategy aims to deliver on the Australian Government's ambition for Australia to be a leading digital economy and society by 2030.”. the Australian delegate would be President Anthony Albanese. Albanese's view on AI is the same as the AI action plan.
- **Russia**
  - Russia is a modern superpower located in northern Asia. Russia boasts the 8<sup>th</sup> largest economy in the world. The Russian AI plan is unique because it isn't controlled by the government nor by private sectors, it is controlled by state officials and local state governments deciding how to proceed with AI in their local districts. The Russian delegate is Vladimir Putin. Putin's opinion on AI is that it is up to the state aside from military purposes.
- **China**
  - China is also a modern superpower located in east Asia. China boasts the world's 2<sup>nd</sup> largest economy. China is also an AI superpower, the Chinese AI plan is the 2017 New Generation AI Development Plan laid out the goal of global AI leadership by 2030, which led to an explosion in industry activity and policy support for AI development. China's delegate is President Xi Jinping. Jinping's opinion on AI is that it should be controlled and used for profit.
- **South Korea**
  - South Korea while not a forerunner in military or economic power although, they are one of the most developed countries technologically. South Korea's AI Strategy is as follows the government explained that a balanced set of initiatives aimed at reinforcing the competitiveness of the AI technologies and industries as well as realizing human-centered AI, while simultaneously concentrating on Korea's strengths, is the key characteristic of this strategy. The south Korean delegate which is President Yoon Suk Yeol agrees with the policy.
- **Japan**
  - Japan, like South Korea is an AI giant and boasts the world's 3<sup>rd</sup> largest economy. The Japanese AI plan is as follows: Japan is looking to regulate the development and use of artificial intelligence by taking a light touch approach to the technology in a bid to quickly capitalize on the potential of AI to solve some of the problems caused by its rapid population decline. The Japanese delegate is Fumio Kishida, who advised the creation and agrees with the plan.
- **Germany**
  - Germany is a modern power located in central Europe. Germany also boasts the world's 4<sup>th</sup> largest economy. The German AI plan is as follows: The goal is to establish “AI made in Germany” as an international trademark for innovative, secure AI applications aimed at serving the common good in line with Europe's core values. The German delegate is Frank-Walter Steinmeier who greatly pushes along the AI plan as he believes it'll prop up the economy.
- **Mexico**
  - Mexico is a rapidly modernizing country and boasts the 14<sup>th</sup> largest economy in the world. The Mexican AI plan is as follows: the government should maintain and share core data services which describe the country and provide information relating to the delivery of public services. This essentially means that AI can be enjoyed by everyone and used as a public commodity. The Mexican delegate is President Andres Obrador, who has made leaps to provide good footing for AI companies to flourish.
- **North Korea**
  - North Korea is the opposite of a modern or advanced. North Korea has very little to no AI or a plan for it. All that's been uncovered is that North Korea plans to use AI as a weapon for cybernetic attacks and AI drone strikes. The North Korean Delegate is Kim Jeong Un. The Plan completely ran through him, so he had all the decisions meaning he fully endorses it.

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