ITU

INTERNATIONAL TELECOMMUNICATION UNION

2023

CJCP MODEL UN

Committee Topic:

The Impact of AI and Autonomous Systems on Economic Development

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MESSAGE FROM OUR DIAS MEMBERS

Kunal Singh
kunalsingh@cjcollegeprep.org

Dear MUN Delegates,

Welcome to CJCP MUN 2023! My name is Kunal Singh and I am a senior at Central Jersey College Prep. I will be serving as your Chair for the International Telecommunication Union committee. We are so thrilled to have our first Model UN at CJCP and I can't wait to meet you all!

I have been part of Model UN since the beginning of my sophomore year in high school. As someone who never had much public speaking and leadership experience, it was definitely a new environment for me. When I went to my first conference for MUN, I was the most nervous person in the room. It took a lot of courage for me to go up and start speaking with others. But as I started to adapt to the conference, making connections with other delegates, it became much easier. Even though it was my first time, I wanted to stand up and share the ideas I researched for the past few months. I opened the boundaries of my comfort zone and developed a liking for public speaking. So after joining many conferences, I was able to build up my leadership skills and even do other extracurriculars similar to Model UN. So my fellow delegates, I highly advise you to do your research before coming to the conference. Spend as much time as you need, and come up with great solutions. Even if this conference isn't your first time doing Model UN, I hope you learn new skills from this experience and use them in the future. And while you're there, make new friends! When I went to all my conferences, the best thing to do was make connections. Meeting new people isn't easy, but being in a conference room for hours allowed us to connect and even chat in the future.

Delegates, the biggest advice I have for you is to be prepared before the conference even starts. I know that it isn't easy, but I guarantee it will give you the biggest boost ever! I hope all of you learn something new and maybe even use it in the real world. I can't wait to see you guys and the exciting ideas you will put on the table! If you have any questions or concerns, please feel free to reach out!

Sincerely,
Kunal Singh
CJCPMUN Chair

MESSAGE FROM OUR DIAS MEMBERS

Aanya Patel
aanyapatel@cjcollegeprep.org

Dear MUN Delegates,

I am excited to welcome you to CJCP MUN. My name is Aanya Patel and I am a sophomore at CJCP and will be serving as your Vice Chair for the ITU Committee. I have been a part of CJCP's MUN delegation for 5 years. This is my first year as a vice chair of a committee and I am ecstatic to welcome you to this year's conference.

I joined Model UN when I was in 6th grade and it has been such a great experience. Out of everything that Model UN has done for me, it has helped me get out of my comfort zone and develop new skills such as public speaking and leadership skills. Model UN is by no means easy and it will take effort, time, and patience. When I first started I was clueless, but as you continue your journey through Model UN I can guarantee that you will learn lessons and skills that can transfer to your everyday life. One of the biggest lessons I learned when doing Model UN was that there is no easy solution to any problem. If there was then the issue would have already been resolved. Delegates must develop effective problem-solving skills and proper communication with other delegates to collaborate and find solutions that could be used to solve global problems. As you embark on your MUN journey with CJCP I want you to remember that the whole purpose of this conference is to come together and take away new experiences and knowledge. We expect delegates to be open-minded and willing to learn and expand on their knowledge and skills.

I have had the best experience participating in MUN Conferences and developing new skills. I hope that you guys have the same experiences in CJCP MUN and I can't wait to see you at the conference. If you have any questions or concerns please feel free to reach out.

Sincerely,
Aanya Patel
CJCPMUN Vice Chair

Rules of Procedure

The Rules of procedure are three types: Motions (Verbal and Non-Verbal), Points, and Yields.

Verbal Motions

1. **Motion to Set the Agenda:** "Country X motions to set the agenda in favor of topic X." Note that, since there will be one topic per committee this year, the agenda will already be set in favor of each committee's topic. **This Motion Requires an Absolute Majority**
2. **Motion to Set the Speakers List:** "Country X motions to set the Speakers List to Y seconds." **This Motion Requires an Absolute Majority.**
3. **Motion to Suspend the Debate:** The debate can be suspended to a moderated or unmoderated caucus, soliciting of third parties, or consultation of the whole.
    a. **Moderated Caucus:** "Country X motions to suspend the debate for a moderated caucus to discuss Y for a total time of Z minutes and speakers time of V seconds." **This Motion Requires an Absolute Majority**.
    b. **Unmoderated Caucus:** "Country X motions to suspend the debate for an unmoderated caucus for the purpose of Y for a total time of Z minutes". **This Motion Requires an Absolute Majority.**
    c. **Consultation of the Whole**: "Country X motions to suspend the debate for a consultation of the whole, to discuss Y for a total time of Z minutes." **This Motion Requires an Absolute Majority.**
4. **Motion to Introduce Draft Resolution:** "Country X motions to introduce Draft Resolutions." **This Motion Requires an Absolute Majority.**
5. **Motion to Begin Debating on Amendments:** "Country X motions to begin debating on amendments.**" This Motion Requires an Absolute Majority.**
6. **Motion to Adjourn the Meeting:** "Country X motions to adjourn the meeting for the purpose of lunch." **This Motion Requires an Absolute Majority.**
7. **Motion to Close the Debate:** "Country X motions to close the debate and move into voting procedures..." **This Motion Requires a Two-Thirds Majority.**

Rules of Procedure

The Rules of procedure are three types: Motions (Verbal and Non-Verbal), Points, and Yields.

Written Motions

1. **Right of Reply**: This is requested when a delegate feels that another delegate has made a derogatory comment to the country they are representing. **There is no Right of Reply to a Right of Reply.**
2. **Appeal to the Chair's Decision:** This is used when a delegate feels that the chair committed a mistake or acted unfairly.

Points:

- **Point of Order:** This is used when a delegate feels that the chair or a fellow delegate has made an error in the running of the committee. **This Point is Interruptive.**
- **Point of Parliamentary Procedure:** Also known as a point of inquiry, this is used when a delegate has a question regarding the rules of procedure or flow of debate. **This Point is Non-Interruptive.**
- **Point of Personal Privilege:** This is used when a delegate has a certain personal discomfort. **This Point is Interruptive.**
- **Point of Information:** This is used when a delegate does not understand or needs more clarification on a certain speech or notion that a delegate gave. This Point is Non-Interruptive.

Yields:

Yields are only used when a delegate does not use their whole speaking time during the formal debate. There are three types:

Rules of Procedure

1. **Yield to the Chair**
2. **Yield to Another Delegate**
3. **Yield to Questions**

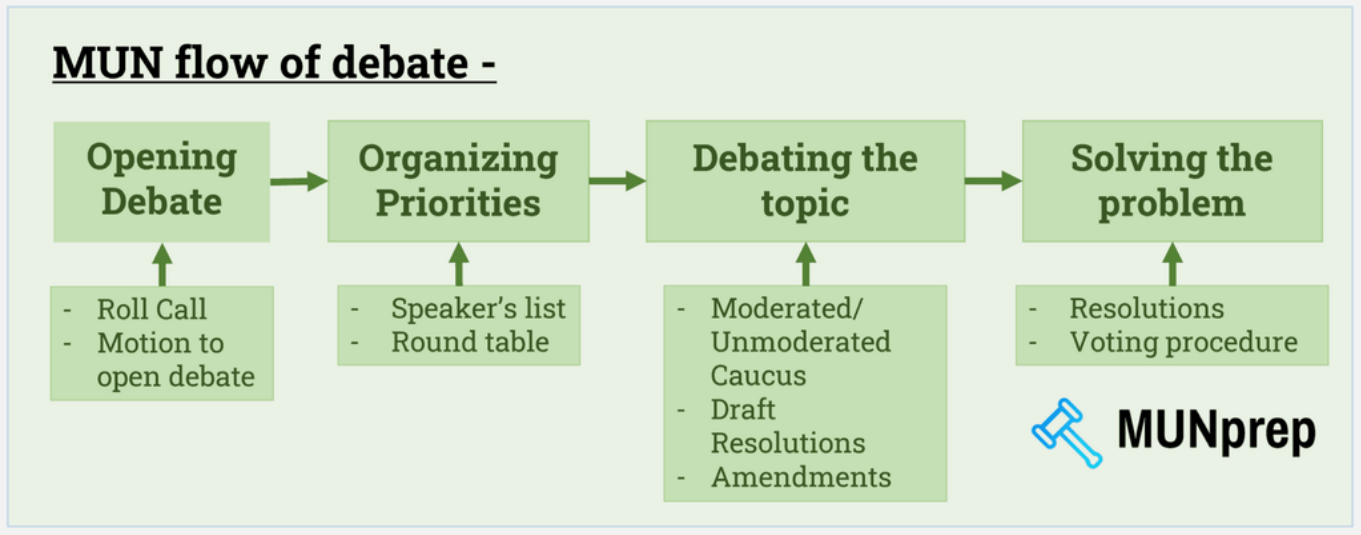
Amendment:

There are two types of amendments:

1. **Friendly Amendments**: A change to a draft resolution that all sponsors of the latter agree with.
2. **Unfriendly Amendments**: A change to a draft resolution that not all sponsors agree with. **This Amendment requires an Absolute Majority vote to pass**.

Passage of Resolutions:

In small committees, Draft Resolutions will require a two-thirds majority to pass. In large committees, they will require an absolute majority. **Each Chairperson will point out at the beginning of the session the 'required number to pass' votes that will be applied in each committee.**



COMMITTEE INTRODUCTION

The International Telecommunication Union (ITU) is a specialized agency within the United Nations (UN) that is responsible for information communication technologies (ICT). Its mission is to integrate technologies as well as foster the advancement of technological developments to allow everyone to benefit from them. The ITU officially became a specialized agency under the UN in 1947 and since then has witnessed the development of new technologies such as radio communications and even communication satellites.

On May 17th, 1856, France's government hosted the first International Telegraph Conference located in Paris where the International Telegraph Union was founded after 20 European countries signed the convention. Later, this Union would sign an agreement to become part of the United Nations on November 15, 1947. Since, then ITU has developed various standards, regulations, and policies to ensure safe and equal communication while also promoting various sources of collaboration between governments and businesses.

Today, the International Telecommunications Union comprises 193 member countries all of which have assisted in creating new policies and regulations through the rise of innovations in technology that are changing the world. ITU comprises three sectors that are responsible for setting and implementing frameworks based on technicalities that each sector specializes in. These sectors are:

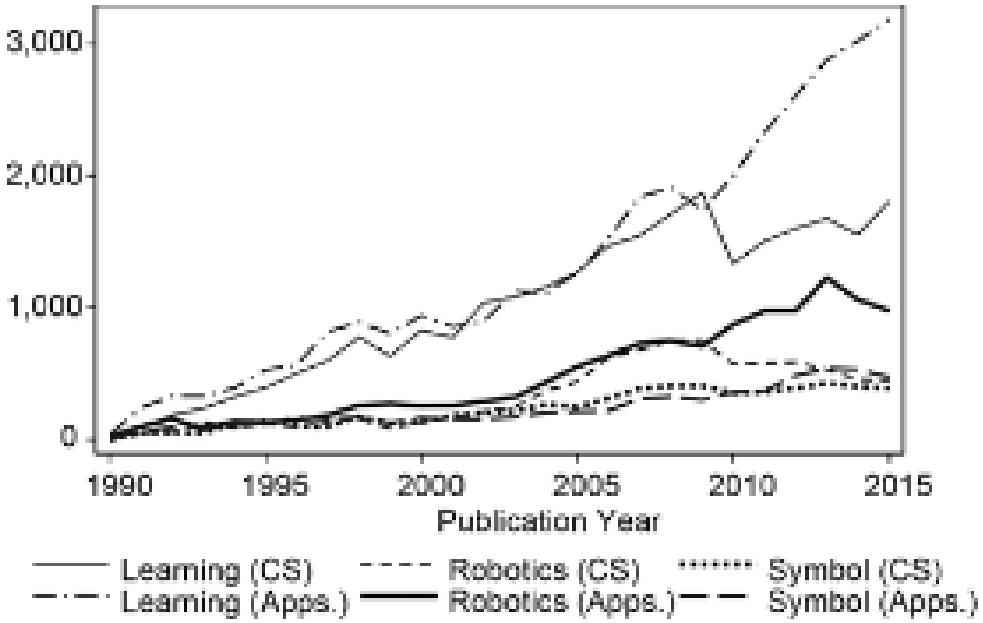
- ITU-R: The ITU Radiocommunication Sector manages the radio frequency spectrum and satellite orbits in order to provide efficient and interference-free radio communication. Its main role in the ITU is to look over public data, carry out examinations on the radio spectrum, and set regulations pertaining to this.
- ITU-T: The ITU Telecommunication Standardization Sector defines how all telecommunication networks operate and interwork on a worldwide basis along with defining tariffs and other principles on an international spectrum.
- ITU-D: The ITU Development Sector plays a vital role in getting developing countries the access to telecommunication development that they need. This includes providing training programs, financial strategies, and a variety of policies and regulations.

AI's Impact on Economic Development

In recent years, the rapid growth of Artificial Intelligence (AI) and autonomous systems has made a significant impact on global economic development. Remember those cool ideas of talking robots and flying cars? Well, they're not just ideas anymore – they're real, and they've changed a lot of things in different industries and societies. AI-driven machine learning has become really powerful, helping companies do things better and faster. Studies suggest that AI could add a massive $13 trillion to the world economy by 2030 – that's a lot of money!

At the same time, smart autonomous systems are taking on complex tasks, like making things in factories, taking care of people's health, moving things around, and handling money. It's like a big wave of change sweeping through industries. In fact, experts think that by a certain year, there might be more than 2.6 million robots working in industries worldwide. This shows how much things are changing because of these cutting-edge technologies.

But with all this innovation comes a challenge: some people worry that jobs might disappear because machines are doing the work. So, it's really important to help people learn new skills for jobs related to AI. In the next couple of years, more than half of the workforce might need to learn new things because of technological changes. It's all about finding a balance between making new things and thinking about what's right for everyone. Governments and people who make rules should focus on making AI accessible, fair, and helpful for everyone. This way, we can make sure AI benefits everyone and moves us forward in a good way.



TOPIC INTRODUCTION

Describing the Issue

The escalating impact of AI and autonomous systems on economic society stands as a paramount concern in our ever-evolving world. The fusion of both of these technologies is revolutionizing industries, reshaping the very fabric of the economic landscape. As these cutting-edge innovations increase productivity and efficiency, they also raise questions about potential job displacement and ethical implications within the workforce. Navigating this transformative era requires a delicate balance between embracing innovation and addressing the socio-economic challenges posed by AI and autonomous systems. Policymakers must steer towards promoting economic development, fostering inclusive growth and prosperity for all of society. The impact AI and autonomous systems have on economic growth is both exciting and challenging. As we navigate this transformative landscape, thoughtful consideration of ethical, social, and economic implications is necessary.

Definition of AI and Autonomous Systems

Artificial intelligence (AI) refers to the simulation of human intelligence and its problem-solving/decision-making capabilities processed through computer systems. Artificial intelligence has been exponentially rising due to its ability to perform tasks much more efficiently and accurately, particularly when it comes to repetitive and detail-oriented tasks. Autonomous systems. on the other hand, is a subset of artificial intelligence that refers to technologies that are able to perform tasks and make decisions without constant human presence. They typically have a combination of AI as well as other technology and physical mechanisms to interact with the environment.

Furthermore, AI is a broader concept that refers to human simulation intelligence, while autonomous systems are a subgroup of this that encompass specific applications of AI that operate independently such as self-driving cars or drones.

APPLICATION IN DIFFERENT SECTORS

AI and Autonomous systems have a wide range of applications in various sectors. We are already seeing this technology being implemented in the healthcare sector as AI continues to aid medical staff in diagnosis and personalized medical treatments. In the future, it is predicted to grow till the point in which robots using AI will be able to assist in the operating room with surgeries. As AI becomes more efficient, it will become more reliable during surgeries and prevent human errors which AI wouldn't be able to make. Furthermore, AI and Autonomous systems have been almost fully adopted into manufacturing certain goods. More than 64% of global manufacturing is considered to be automated and this percentage is targeted to continue increasing.

In the past decade, the energy sector has significantly grown through the implementation of green energies. Autonomous systems are able to manage the power grids to optimize energy distribution and allow the greater distribution of green energy to various areas. Lastly, there is the financial sector: AI-driven algorithms are able to analyze large amounts of financial data at a given time to detect fraud, greater risk, and even algorithmic trading. These are just a few examples of the application of AI and autonomous systems but there are several more distributed through various sectors of public safety, military, space explorations, education, etc. As technology advances, industries find ways to utilize these advancements and leverage them to their benefit.

JOB DISRUPTION & CREATION

Accelerating artificial intelligence (AI) capabilities will pave the way for automating tasks that have traditionally relied on human labor," as stated by the Executive Office of the President during the rise of AI. This cutting-edge technology has brought incredible progress to areas like education, healthcare, manufacturing, social welfare, and environmental conservation. In certain things like reading, AI is even doing better than humans! As AI gets better, it's taking over tasks that are boring and follow clear rules. This might mean that some jobs in these areas could be done by machines. So, people who work in these jobs might need to learn new things because of AI.

To handle the changes in jobs and to find new ones, governments, schools, and businesses need to work together. They should invest in training programs and learning opportunities so that workers can learn new skills for the jobs that AI creates. Also, if we support new ideas and new businesses, we can create even more jobs and make the economy better. It's all about preparing for the future and making sure everyone can benefit from AI's abilities.

HISTORY OF THE TOPIC

Evolution of AI and Autonomous Systems

1950: The seeds of AI were sown by great minds like Alan Turing, who envisioned machines that could think like humans. Computing power was limited at the time, hindering progress, but the term "Artificial Intelligence" was coined. Many researchers used Turing's discovery as a way to develop algorithms for specific tasks, such as playing games. Along with the creation of AI also came Henry Ford's assembly line. This technology allowed work to be taken to the workers with technology. While there were big leaps during this era, many believed the ideas of self-driving cars and robots as "distant dreams."

1990: This period marked a resurgence of interest in the world of Artificial Intelligence. Machine learning techniques gained traction, allowing computers to learn from data. Applications like spam filters and early speech recognition systems emerged. Spam filters were used to distinguish between legitimate emails and unsolicited messages. These systems began to understand spoken words but had questionable accuracy. The groundwork laid during this period highlighted the potential of AI to drive productivity, innovation, and economic growth.

2000: As the new decade arrived, the AI landscape went through a transformative shift. Machine learning techniques matured, empowering computers to handle complex tasks. A new system many individuals use as image recognition technology enables computers to identify objects within images. These developments began to infiltrate daily life, influencing how people interacted with technology and consumed information.

2015: The world of AI and Autonomous systems altered industries and daily routines during this time. Deep learning techniques powered by neural networks emerged as the driving force behind breakthroughs in various domains. Speech and image recognition achieved remarkable accuracy, giving rise to virtual assistants like Siri and Alexa. Autonomous systems such as self-driving cars shifted from mere speculation to actual prototypes. Recommendation systems, fueled by AI algorithms, transformed how individuals discovered content online, from movies to products.

2023: As of now, AI and autonomous systems have become integral parts of our lives, reshaping industries and raising ethical considerations. With the rise of companies such as Tesla, self-driving cars are gradually becoming a common sight on streets, offering efficient transportation. AI-driven medical diagnostics have proven essential in assisting healthcare professionals with pinpointing conditions with great precision. Smart assistants and chatbots have changed daily routines and complex tasks. Despite these leaps, concerns regarding bias, privacy, and job displacement are becoming a serious topic in the present day.

Breakthrough in AI

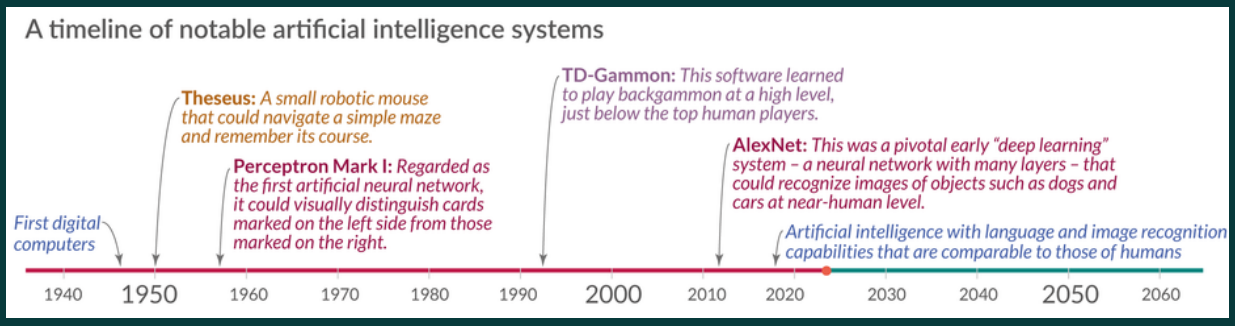
1952 - Audrey: Bell laboratories designed a system called Aubrey that was the first piece of programming that could detect and recognize a single voice speaking digits aloud.

1956 - Dartmouth Summer Research Project in Artificial Intelligence (DSR PEI): Allen Newell, Cliff Shaw, and Herbert Simon developed The Logic Theorist which was a program that mimics human problem-solving skills and was considered to be the first artificial intelligence program by many.

1960s - Facial Recognition: Woody Bledsoe, Helen Chan Wolf, and Charles Bisson developed the first computer that recognized human faces. As technology advances, AI is being used for facial recognition as well. Now, we can see this technology being used in cameras and even iPhones.

1997 - Chess match: Reigning world champion Gary Kasparov played IBM's Deep Blue (a chess-playing computer program) marking the first time that a person had lost to a computer program and served as a considerable step towards AI decision-making.

2020 - GPT-3: The Generative Pre-trained Transformer (GPT) series by OpenAI has been a huge development in AI. It demonstrates unprecedented language understanding abilities.



AI and Economic Growth

The rapid integration of Artificial Intelligence into everyday tasks has raised debates about its impact on global economic growth and employment patterns. According to a 2023 survey by CfM-CEPR, experts predict that AI could elevate global growth to 4-6% annually, outstripping the historical average of 4%. While opinions on AI's influence on employment in high-income countries vary, it has a great impact on the transformative economy.

Tech entrepreneur Mihir Shukla stated, "AI is already here," underscoring its widespread use. The surge of AI is exemplified by its ability to reach milestones in a matter of no time. For example, applications like Instagram took two years to reach 100 million users, while ChatGPT accomplished the same feat in just 60 days. Artificial intelligence has rapid technological advancements, which is why it spans sectors like finance, healthcare, translation, and transportation. Individuals believe by 2030, 70% of companies will start implementing AI, and the GDP rates for countries could go up by 14%. Others think that AI and other technological progress endanger job opportunities.

CURRENT SITUATION

Job Market Transformation

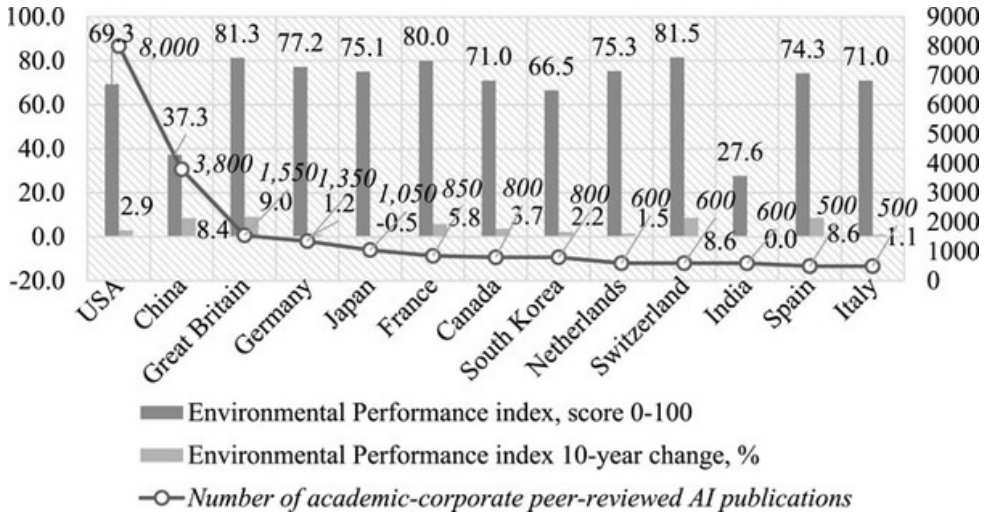
The job market is experiencing rapid transformation as AI and Autonomous Systems are being integrated into our daily lives. While these new technologies are able to automate certain tasks it has created new opportunities in development and maintenance for these networks. The World Economic Forum concluded in 2020 that "While AI would likely take away 85 million jobs globally by 2025, it would also generate 97 million new jobs in fields ranging from big data and machine learning to information security and digital marketing."

Healthcare: AI has been used in the medical field for a variety of uses such as medical diagnoses, personalized treatment plans, and patient monitoring. An example of AI's integration into healthcare can be seen in a study where 25,000 blood samples were used to allow AI to learn to identify bacteria within the blood samples. Now this program is able to predict the presence of bacteria within the blood with a 95% accuracy which has reduced fatality by a large margin.
Finance: Within the financial sector, AI has been seen to investigate and detect fraud detection while also having programs that make increasingly accurate decisions with algorithmic trading.
Transportation: AI has revolutionized transportation technologies such as self-driving cars. With sensor fusion technologies and enhanced machine learning capabilities, transportation is now safer than ever. It can also use previously gathered information about transportation routes to optimize delivery routes.
Manufacturing: AI is transforming manufacturing with the implementation of smart factories, where robotics and advanced automation systems are able to make production processes faster and more efficient with reduced amounts of waste.
Retail: Customer experience in the retail sector is being improved significantly due to the use of AI. This can be seen in personalized recommendations and advanced inventory management. AI-driven analytics also help retailers understand customer preferences, allowing them to customize the products and goods according to the customer's preferences.

AI SUSTAINABILITY

Most people believe Artificial Intelligence is destroying the world; in reality, it's helping create a sustainable future. It's not just about technology, but using AI to tackle environmental challenges and fight climate change. Imagine AI-powered clean energy grids that optimize energy distribution, precision agriculture that reduces resource waste, and sustainable supply chains that minimize environmental impact. According to Microsoft, the potential economic impact of AI in managing the environment is staggering, estimated at up to $5.2 trillion USD by 2030. This could boost the global economy by 4.4% compared to business as usual and cut greenhouse gas emissions by 4%, equal to the annual emissions of Australia, Canada, and Japan combined.

AI isn't a job destroyer, it instead creates them. With an estimated 38.2 million net new jobs globally, it offers skilled occupations, aligning with the changing landscape of work in the 21st century. However, it's crucial to strike a balance between economic growth and environmental protection, especially considering the shift in priorities caused by the COVID-19 pandemic. Sustainable AI is emerging as a pivotal concept. It's not only about reacting to crises but using AI as a "smart" environmental protection tool to anticipate and prevent future threats. This shift in perspective is essential for harnessing AI's full potential in safeguarding our planet. In recent years, AI's contribution to environmental economics and management has been on the rise, reflecting a global commitment to sustainable practices. As we look ahead, AI and sustainability will continue to connect, guiding us toward a prosperous future.



AI ETHICS AND TRANSPARENCY

Evolution of AI and Autonomous Systems

UAE: In the context of UAE's progressive policies, the incorporation of AI ethics and transparency is pivotal for shaping a technologically advanced and accountable nation. As AI continues to play a transformative role in various sectors, it is imperative for the UAE to establish clear guidelines and regulations that prioritize ethical AI practices. Ensuring transparency in AI algorithms and decision-making processes will not only foster trust among citizens and businesses but also help in mitigating biases and discrimination. By proactively addressing AI ethics and transparency, the UAE demonstrates its commitment to harnessing the full potential of artificial intelligence while upholding its core values of fairness, inclusivity, and responsible innovation.

European Union: The European Union (EU) is currently striving to improve and actively develop its AI capabilities. As proposed in 2021 by the European Commission, according to Stanford, "The EU AI Act is set to become the world's first comprehensive legal framework for artificial intelligence." At the same time, the EU is actively working on the ethical aspect of AI to ensure transparency as well as data protection and privacy. The EU has also enforced an Artificial Intelligence Act of 2023 whose purpose is to have AI systems within the EU follow regulations to be transparent and reliable in all applications including Biometric Identification and categorization systems. The EU is continuously improving its frameworks and development in AI while drafting regulations for AI in high-risk applications such as healthcare, autonomous transportation, as well as finance.

Workforce Development

Canada: A recent study involving 5,140 Canadians resulted in staggering results that show just how much AI has impacted the workforce. Out of this group of 1,502, almost 20% acknowledged using AI to generate ideas, create presentations, and other basic tasks. Respondents reported that using AI technologies has boosted their productivity significantly and improved the quality of their work. Almost half of the users reported that when using AI they were able to save 5 hours per week of work which resulted in them being able to take on additional work. The workforce is rapidly adapting to the use of AI and implementing it into their workload. Not only is AI being integrated into the workforce but Canadian universities have invested in AI programs and courses to help educate students in ways teachers are incapable of doing. Overall, Canada has many significant developments in implementing AI in its workforce leading to a workforce capable of driving AI innovation to various sectors.

AI and Autonomous Adoption in Key Industries

Japan: In the dynamic landscape of Japanese policies, the strategic adoption of AI and autonomous technologies in key industries emerges as a driving force for economic growth and innovation. Japan's commitment to technological advancement is evident as it paves the way for AI integration in sectors such as manufacturing, healthcare, and transportation. By embracing automation, Japan not only seeks to enhance productivity and efficiency but also address demographic challenges, such as an aging population. This forward-thinking approach aligns with the country's overarching policies to bolster its position as a global leader in innovation and reinforces its reputation for fostering cutting-edge solutions that cater to both its domestic and international needs.

MODERATED IDEAS/QUESTIONS

Questions to consider

1. What strategies can governments and businesses implement to help workers adapt to the changing job market driven by AI?
2. What are some of the benefits and drawbacks of using AI and autonomous systems in various sectors, such as healthcare, manufacturing, and transportation?
3. Are there any potential challenges or risks associated with relying heavily on AI for economic development?
4. Are there any specific training programs or educational initiatives that you believe would be effective in preparing the workforce for AI-related jobs?
5. Consider the potential impact of regulations on innovation and economic growth.

Topics to consider

1. Ethical Frameworks for AI Use in the Workforce
2. Government Regulation of AI and Autonomous Systems
3. AI and the Future of Manufacturing
4. International Collaboration on AI Development

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