



DISARMAMENT
AND
INTERNATIONAL
SECURITY
TOPIC BULLETIN

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CHAIRS

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Academy Model United Nations

- THE TWENTIETH ANNUAL CONFERENCE -

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Hello delegates!

My name is Grace Liang, and it is an honor to be able to serve as your Head Chair at DISEC at AMUN XX! We will be able to have much discussion and debate about the current issues the world faces as technology advances. To introduce myself, I am a senior at the Academy for Business and Finance at Bergen County Academies. I have been a part of Model UN since my freshmen year, and have been attending both college and high school conferences ever since. In fact, my first conference was AMUN during my freshmen year, and it was a great experience. I learned so much about the procedures and inner workings of MUN and was able to meet great new friends. At times, it was challenging, trying to gather support and make compromises, but, overall, it was a worthwhile experience. I was able to learn from the more experienced delegates and watch how they spoke and worked with other delegates. I am so excited to hear your arguments, positions, and policies. More importantly, I am eager to see how you represent the various countries and how you work together despite having differing interests. As your Chair, I want to ensure that your AMUN experience is as great as mine was, so please ask me any questions you have!

Grace Liang, Chair, DISEC
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Dear Delegates,

Welcome to AMUN XX! My name is Jason Ping and I am thrilled to be the Vice-Chair of DISEC this year. Just a bit about me: hailing in from the incredibly Asian town of Fort Lee, I'm currently a junior in the Academy for Engineering, Design, and Technology. I've been a part of BCA's MUN travel team since my freshman year, and it has thus far been an integral part of my highschool experience. MUN is far one of the most transformative experiences of my life, as I'm sure it has for many of you as well. I'm also an avid member of Class Council and Student Council, as well as have a hobby for coding and AI (can you guess who picked Topic B?) This year in DISEC we've focused on fixing one of the largest issues in DISEC. DISEC and the international community have had the tendency to only address issues after the damage has been done. But we must become proactive, not simply reactive, if we want to ensure a safe future. This year's topics - space development and AI - both relate to incredibly complex and advanced technologies that have not yet been thoroughly discussed. We look forward to the collaboration, creative resolutions, and powerful speeches I'm sure you will all bring to the table. One of the beauties of MUN is that it teaches us to look beyond just what the immediate media and news tell us and to have a wider perspective on the world. Hopefully by the end of this conference, you too will have a new view on what's around you. I really am beaming with excitement as the days grow closer to AMUN XX, and I can't wait to meet you all!

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Topic A: Consequences of Space Development

Introduction:

Formed in 1945, the First Committee in the United Nations deals with disarmament and international security, also known as DISEC. This committee generally discusses issues relating to the arms trade; global security; and biological, chemical, technological, and nuclear weapons. DISEC is one of the six committees at the General Assembly, so all 193 member states of the United Nations can attend and have equal representation. Countries send representatives from around the globe to address any international threats to peace and to collaborate with other members to develop solutions.

At the Academy Model United Nations Conference this year, one of the two topics delegates will be discussing is the consequences of space development. Ever since the Space Race during the Cold War between the United States and



Russia, huge strides have been taken in terms of technological innovation and space exploration. In the international community, discussion has arisen over the need for the peaceful use of space in order to prevent its militarization. Furthermore, the increasing privatization of space needs to be addressed in terms of possible regulation. Also, some developing countries have stressed the importance of satellites to warn and monitor dangerous weather patterns, and they called for greater investment into these types of technology. Delegates should consider each of their countries' positions in regard to space as they work together in DISEC to develop possible solutions to address these issues.

Topic History:

After World War II, countries began to realize the advantages of long-distance rockets as weapons. As a result, both the United States and the Soviet Union created

missile programs. About a decade later, the two countries entered into the Space Race during the Cold War, in which they competed with each other in space exploration. Much of space exploration was a result of military research and development, and the competition between the two countries pushed the limits of mankind. In 1961, Russian Yuri Gagarin became the first human in space. Eight years later, America achieved an even greater accomplishment when Neil Armstrong became the first man to step onto the moon. These huge steps in space development did not stop with the Space Race either. In 1990, the Hubble Space Telescope was launched, and in 2004, space exploration seeped into the private sector when the first privately funded vehicle reached space.

In response to the space development, the Outer Space Treaty of 1967 was signed to promote peace in space and limit militarization. The treaty called for



outer space to be used for the benefit and interests of all countries and mankind. It also stressed that no nuclear weapons could be placed in space in order to maintain space's peaceful use. In addition, the treaty stated that outer space was allowed to be explored and used by all countries.

Current Situation:

After about half a century, space exploration has had widespread impacts on various fields. For example, scientists have gained much knowledge about the human body, including muscle atrophy, motor coordination disorders, the aging process, and osteoporosis, from experiments conducted in space. In the International Space Station (ISS), there are programs regarding molecular biology, fundamental physics, plant biology, and human physiology. The microgravity of space provides optimal conditions to grow high-quality protein crystals

for new medical treatments and to improve vaccines.

Furthermore, space development has led to other technological innovation, many of which we use daily. Because space presented many challenges to engineers, they had to absolve the issues through new approaches. The high costs of going to space forced designers to create lighter and smaller computers, which eventually led to the laptop that is so popular amongst the public now. Other examples of innovation from space research are solar panels, batteries, advanced robotics, implantable heart monitors, lightweight materials, and water purification systems. More importantly, space has allowed for the widespread use of satellites. Satellites have allowed for telecommunication, the global positioning system (GPS), and weather forecasting. The world has become more connected thanks to satellites, and weather forecasting has reduced the devastating impact of natural



disasters. Ultimately, consumers were offered better products and services as a result of the innovation derived from space development. This has improved people's quality of life by improving their health, safety, and security.

Another aspect of space development is the partnership that is created amongst the countries. Space exploration is often an international project, so it requires global partnerships, which creates trust and diplomacy. In a world with hostile actors and many threats to each nation's security, forming trust between countries is essential to promoting peace. It is also important to note the growing privatization of space. Companies are beginning to offer space travel to private citizens, and they have also been contracted to bring cargo to the ISS and mine for precious metals on asteroids. The private sector is making government technology profitable and open for consumption to the

general public. When the companies compete to innovate, there is also a faster growth in space development. However, companies have many competing interests, such as profitability and their shareholders, while the government only has its own interests in mind.

Country Policy:

United States

President Donald Trump recently called for the Pentagon to create the Space Force, which NASA strongly supports. Ever since 1993, the NASA budget has never been more than 1% of the total federal budget, yet in 1966, the government allocated 4.41% of the federal budget to NASA. Space research has no longer taken priority, but with President Trump's new announcement, NASA's role seems to be increasing. According to Jim Bridenstine, a NASA administrator, space is "an international domain



that has commerce that needs to be protected.”

European Union

The EU believes that space technology is extremely beneficial, but a “growing number of actors in outer space could risk the security of space assets.” They believe that outer space programs should be used peacefully and that there is a need for international space cooperation. They also understand that space development is necessary for forecasting natural disasters.

Association of Southeast Asian Nations (ASEAN)

ASEAN consists of many developing countries who are often hit by natural disasters. They believe it is necessary to develop space technology to prevent natural disasters. They want greater investment in early warning and prevention mechanisms and in satellites to monitor the weather patterns.

Questions to Consider:

How should peace be maintained in space?

What should countries do in response to the US’s announcement regarding the Space Force, if anything at all?

To what extent should the privatization of space be regulated? What are the positive and negative impacts of these regulations?

Should more be done to invest in space development?



Topic B: Artificial Intelligence Regulation

Introduction:

Formed in 1945, the First Committee in the United Nations deals with disarmament and international security, also known as DISEC. This committee generally discusses issues relating to the arms trade; global security; and biological, chemical, technological, and nuclear weapons. DISEC is one of the six committees at the General Assembly, so all 193 member states of the United Nations can attend and have equal representation. Countries send representatives from around the globe to address any international threats to peace and to collaborate with other members to develop solutions.

At the Academy Model United Nations Conference this year, one of the two topics delegates will be discussing is the regulation of artificial intelligence. What began as fictitious movie plot lines of self-thinking programs has now made the transition from the big screen over to our everyday lives. While the broad category of



artificial intelligence simply refers to computers possessing human-like cognitive abilities, a more specific subcategory of AI has grown to be most useful: machine learning. Machine learning is the application of statistical algorithms towards large sets of data in hopes of retrieving information and mapping the data's underlying structure. Machine learning is responsible for a large portion of modern-day technology, from its smaller feats such as filtering spam from inboxes or speech recognition to its larger, more significant capabilities such as diagnosing cancer more accurately than doctors or powering self-driving cars. However, this new technology can act as a double-edged sword. As more and more countries begin to adopt machine learning, the UN must begin to consider the malicious and potentially life-threatening implications this new innovation brings.

Topic History:

In 1863, the first written article to voice concern about the intelligence of machines was published. Written by Samuel Butler, the article "Darwin among the Machines" argues that as machines become increasingly sophisticated, they will eventually become more powerful than humans, replacing our spot as the dominant species. In 1956, the term "artificial intelligence" was coined during the Dartmouth Summer Research Project on Artificial Intelligence conference hosted by computer scientist John McCarthy. While the progression of machine learning and AI had been very slow during the 1900s - this mostly due to technological limitations - the creation of more powerful computers has allowed AI to flourish. However, with such a recent shift, the dialogue surrounding artificial intelligence regulation is just beginning.



Current Situation:

It can be said without question that artificial intelligence and machine learning have transformed the world socially, economically, and politically. Likewise, it can be said without doubt that this technology has brought many positive benefits - to compile a list of them all would make this topic guide far too long. However, this is not to say there is a consensus on whether these benefits outweigh the cons, and whether we should continue to pursue research in this field.

The first point of concern for many is artificial intelligence's impact on the job market. A two-year study from McKinsey Global Institute suggests that by 2030, automation could replace around 30% of the world's human labor. The ramifications of such a shift are exponentially more drastic in poorer countries that rely on industrialization and manufacturing. Take Bangladesh,

for example - the garments industry alone supplies over 5 million jobs to women - many of whom cannot read and depend on the industry to support their living - and also constitutes 80% of Bangladesh's exports.

Unfortunately, many predict this industry will be replaced with automated robots located near consumer markets. This isn't to mention the deception AI can bring about. One issue that has recently come to light, especially in the United States, is the advent of "fake news." Machine learning has made the production of false media both easier and more believable. In 2017, researchers from the University of Washington produced a model of former US President Barack Obama that could synthetically repeat any sentence given in a photorealistic manner. (Here's the video to check it out: <https://www.youtube.com/watch?v=AmUC4m6w1wo>). This research is only a glimpse of the dangers that AI can cause in terms of propaganda and false information.



Another key concern is with AI-augmented warfare - perhaps one of the main issues that DISEC should be addressing. Whilst the pros of such advancements include the reduction of soldier casualties for the country wielding these tools, the cons have been widely debated. Just as how the nuclear arms race almost resulted in the end of the world, an AI arms race can have the same catastrophic impact. Once any major military power pushes forward with AI warfare development, such an event is inevitable - thus, it is now more important than ever that proper regulation is set into place to prevent this from growing out of hand. Artificial intelligence-based weapons can be exploited by dictators to control their citizens, terrorists, and radical governments to target specific minority groups. In fact, such a controversy has already begun with countries such as Pakistan and Yemen claiming that the US is exploiting unmanned drones in

targeted attacks and assassinations. This topic has already garnered many to voice their opinion on the topic, such as Elon Musk, who believes “competition for AI superiority at national level [is the] most likely cause of WW3.”

Questions to Consider:

How should AI research be regulated without stunting its benefits for society?

What measures can be put into place to prevent AI from being exploited?

Should AI be allowed in warfare?

What can be done to prevent job loss or mitigate its effects?



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