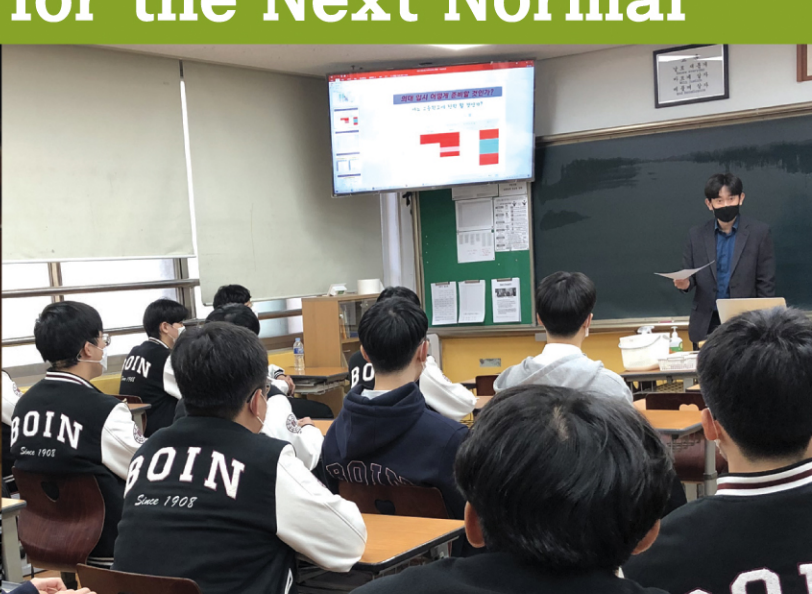


English Newspaper by Boin High School Students

THE BOIN TIMES



Preparing for the Next Normal



| The Corona 'New Deal' in Korea | Facts and Information about Viruses |



BOIN HIGH SCHOOL

**Renew everyday,
with justice,
and beneficence.**

Boin High School inspires students with passion for learning and to succeed in all they wish to accomplish while contributing to the global community.

To learn more,
visit <http://boin.hs.kr>



12



14



15



22



32

“This year was a remarkably difficult year without any rhythm of normal life..
Nonetheless, it was definitely a time that made us stronger and more resilient.”
Lee Jeong Hwan, Page 35

in this issue...

messages

Chairman of Daejoo Educational Foundation, Mr.Kim Seok Han	04
Principal of Boin High School, Mr.Kim Jong Hwan	07

features

The coronavirus shock, <i>Song Woo Jin</i>	08
The Corona 'New Deal' in Korea, <i>Kim Jae Hyun</i>	09
Commentary on sociologies of the Covid-19, <i>Nam Seo Jin</i>	10
The global economy outlook after the Covid-19, <i>Song Won Tae</i>	12
The principle behind face masks, <i>Kwon Ha Jun and Song Ji Won</i>	13
What we can do to cut poverty caused by the pandemic, <i>Song Won Tae</i>	14
Tracking the critical moments of Covid-19 in Korea, <i>Kim Kang Min and Song Woo Jin</i>	15
Covid-19 vaccine : when and where it will be made, <i>Kum Jun Su, Lee Jae Won, Lee Jung Hwan, Lee Song Won, and Song Chan Min</i>	16

learning current issues

Steve Yoo's video with netizen's reactions, <i>Kim Roh Bin</i>	18
The recent status of Korea's aviation business, <i>Song Ji Won</i>	19
Abuse claims rocking the Korean sports industry, <i>Park Jun Seo</i>	20
A memorable collaboration of Dior and Air Jordan, <i>Kim Roh Bin</i>	21
Korean football players in elite European leagues, <i>Song Won Tae</i>	22
A new era of e-sports is coming with Riot Games, <i>Choi Jeong Woo</i>	23

building knowledge

Architectures of the near future, <i>Song Ji Won</i>	24
Facts and information about viruses, <i>Kum Jun Su</i>	25
AI in our daily lives - will it bring any benefit?, <i>Lee Hyung Suk</i>	26
What we can learn from cases of IoT vulnerabilities, <i>Choi Si Young</i>	27
Do electromagnetic wave blocking products really work?, <i>Shin Min Kyu</i>	28
Sounds of summer : why cicadas sing and how they make noise, <i>Kwon Ha Jun</i>	29

jobs and careers

Profiler, <i>Kim Jeong Tae</i>	30
White hat hacker, <i>Choi Si Young</i>	31
International lawyer, <i>Park Jun Seo</i>	31
Specialized accountant & auditor, <i>Kim Jae Hyun</i>	32

people and events

Online Seoul career fair, <i>Lim Yoon Jae</i>	34
Student interview : 2020 as the year of pain, a year of hope, <i>Lee Jeong Hwan</i>	35

book reviews

All relationships begin with speech, by <i>Kim Bum Jun</i> , reviewed by <i>Jeong Won Young</i>	36
Eight, by <i>Lee Ji Sung</i> , reviewed by <i>Jeong Won Young</i>	36

Chairman of Daejoo Educational Foundation Mr. Kim Seok Han



Change Makes Change!

The COVID-19 pandemic has left no person or country untouched in year 2020. This pandemic, which is still going on is not just a public health crisis, it is a crisis that has touched every sector in our society, including the education field. However, Boin High School could effectively respond to challenges throughout this year by adapting quickly to the new online teaching and learning environment. Instead of seeking to avoid any uncomfortable situations, teachers and all school faculty members were prepared to face the changes caused by the coronavirus and through inclusive collaboration and open communication, we brought about a set of solutions for online education previously considered difficult or impossible to implement.

Throughout history, the education sector has somewhat been conservative and resistant to change and if coronavirus has taught us anything, it would be about how quickly things can actually change when they need to. From discovering efficient online educational platforms to getting distance students constantly motivated over the

monitor, students and teachers had a big, tough year. Yet, it likely won't be going back to being completely normal soon and we're far from finished finding new ways to create greater value and growth. Then why don't we just see this crisis as an opportunity to improve ourselves or try new things?

As the chief director of Boin, I hope students learn to embrace change. Certain changes can be hard to accept and dealing with them can be exhausting and frightening at first. But once you learn how to cope with change, positive changes will start happening in every area of your life right away, as "change makes change". May this new year bring you warmth and light to guide your path to a positive destination.

Kim Seok Han,
Chairman of Daejoo Educational Foundation

Foundation

Our School Motto

Renew everyday

To renew everyday means to drive for the better tomorrow through continuous learning. If every member of the society seeks progress, the society will be able to take a major step toward building a better, a more civilized community.

With justice

With justice means 'honesty'. Only when everyone is honest can we build a healthy society that can walk the right path. Hence, Boin High School endeavors to educate our students the value of honesty.

Beneficence

Boin High School values charity. This is not necessarily restricted to donations, but rather incorporates the value of looking after each other during times of difficulty. We believe mutual relationship is the engine that keeps our society alive. For that, Boin High School cherishes beneficence.

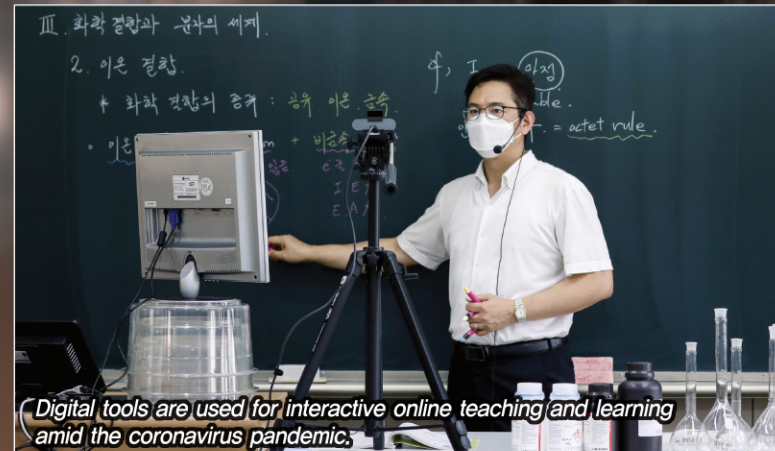
Ever since I was inaugurated as chairman of Daejoo Educational Foundation, I was fully dedicated in providing the best learning environment for our students. I was able to bring outstanding teachers from across the nation and transformed Boin into an acknowledged academic high school. Today, every corner of Boin is filled with proud members of the community. Words cannot express my gratitude, and I look forward to the vast future that lies ahead of Boin! There is no doubt that with the support of all members of the Boin community, including students and teachers, Boin will continue to grow as one of the most accredited schools in South Korea. Thank you.



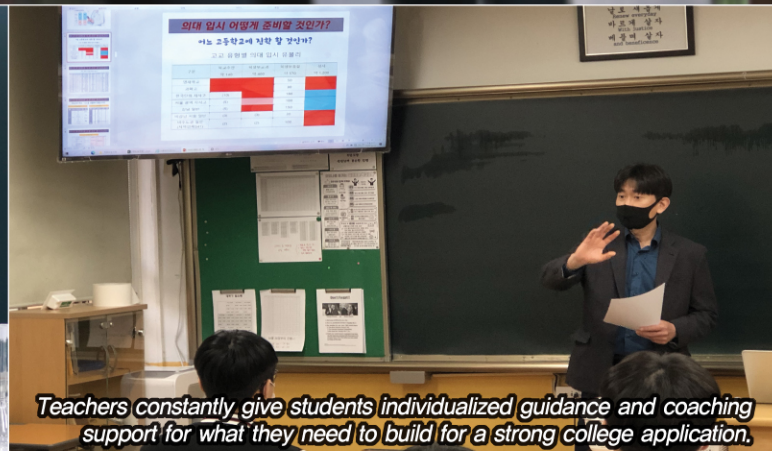
Students nurture all manner of relationships with peers and teachers.



GREAT SCHOOLS have GREAT BENEFITS



Digital tools are used for interactive online teaching and learning amid the coronavirus pandemic.



Teachers constantly give students individualized guidance and coaching support for what they need to build for a strong college application.



Debate contests always give students a creative platform to express what they feel about an issue.



School hosted 14 different online lecture series for students to fulfill their intellectual curiosity.



English camp is annually held for upgrading students' speaking skill in real communication.



The school band(CrossRoad) took center stage at an education fair ceremony.

Message

Principal of Boin High School Mr. Kim Jong Hwan



Welcome all readers, including students and parents, to Boin Times 2020! My name is Kim Jong Hwan, the principal of Boin High School.

Boin Highschool, under the school motto "Renew everyday", "with justice" and "beneficence", endeavors to raise our students into an outstanding individual with a good character and knowledge!

On behalf of Boin Highschool, I promise to raise our students into individuals with good hearts; someone who can be modest, yet generous to lend a hand to those in need. In Boin High School, there are a vast number of extracurricular activities such as Sorokdo Island volunteer work, English summer camps, sports clubs, art contests, and many others, that focus on building our students' character.

Boin High School also strives to educate our students into strong-minded people who are unwilling to give up. On top of maintaining high school grades, we want our students to be able to solve difficult problems through critical thinking; not be afraid of making mistakes, but rather learn from them. We have a diversity of selective classes that students can choose to take, as well as consultation programs and mentoring activities led by successful school graduates. As such, Boin High School provides the best environment where students can focus on thriving for the best of their futures.

Lastly, Boin High School aspires to build our students' self-esteem. One of Boin High School's most valued asset is the dynamic class environment where students and teachers communicate at will to solve problems, share creative ideas, and build a better community. I would also like to emphasize that violence and bullying are not tolerated at Boin in any form. Every staff member at Boin are determined to build a warm-hearted community where students are always felt welcomed.

To all readers of Boin Times, thank you once more for your interest in Boin High School, and for all the support and advice you are sending us. We wish for the best of your upcoming days. Thank you!

Kim Jong Hwan,
Principal of Boin High School

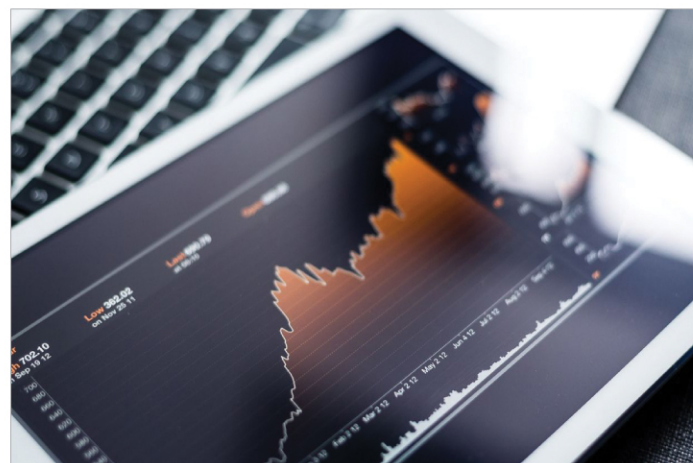


The coronavirus shock

Song Woo Jin addresses the term 'corona shock' and states the effects of COVID-19 pandemic on corporate profit and performance

What is corona shock?

After the outbreak in December 2019 in Wuhan, the coronavirus is rapidly spreading and as situations got worse, the WHO declared a pandemic on March 11. Corona Shock is a term that refers to how a virus struck the world with such gripping force and countries are suffering from an economic stagnation caused by this corona shock.



Corona Shock in Korea

South Korea is being affected a lot by the corona shock. According to a survey, companies' first half year net profit fell 34.1% from the previous year. Compared with the previous year, net income has dropped by more than a third, which is a huge amount. This shows that the Korean economy has been severely damaged by the corona shock. At the first quarter, the economic stagnation came very quickly as corona first began to spread. In the second quarter, the Korean government carried out many policies to increase consumption and stimulate the economy. As the Korean government carried out policies like easing social

distancing and giving out money, consumption slightly increased and the shock of economic performance eased a little. At that time, the number of daily confirmed cases began to decrease, and the economic situation seemed to improve. However, as the number of confirmed cases started to increase since August, the economy seemed to worsen again. The financial investment industry is predicting that the economy will improve again in the second half. Jeong Yong Taek, the director of the research center of IBK Securities Co., says that the key factor that determines the second half of the economic performance is up to the stopping of coronavirus.

Companies affected by the shock

Each company has a different degree of influence due to the corona shock. Travel related companies, such as the aviation industry and the lodging industry, have been severely damaged by the corona shock. Self-employed people are also suffering greatly from the corona shock. However, there are companies that have little or no influence on coronavirus, or even have benefited by the coronavirus. As untact marketing is developing, companies that offer untact consumption are earning profit. For example, the second quarter net profit of Naver and Kakao has increased 120% compared to the previous quarter. Overseas companies such as Zoom and Netflix have grown under the corona situation. For companies to survive under the corona situation, companies should try to offer consumers untact consumption and make good use of the internet.

Song Woo Jin(2-3)

References

- Jeong Eui Gil, "Could the Corona Shock be an opportunity to Korea?," The Hankyoreh, 16 Mar. 2020, hani.co.kr/arti/opinion/column/932805.html.
- Philipp Carlsson-Szlezak, Martin Reeves, Paul Swartz, "Understanding the Economic Shock of Coronavirus," Harvard Business Review, 27 Mar. 2020, hbr.org/2020/03/understanding-the-economic-shock-of-coronavirus.



Commentary on sociologies of the Covid-19

People are living with new rules on the restriction of movement and events or gatherings must limit to a certain number. Nam Seo Jin looks at the effects of the corona virus on society by reviewing on three theoretical perspectives

Surreal disaster situations are unfolding as strange landscapes that can only be seen in movies. It is an unprecedented situation. No one could predict that coronavirus would change our social world with this level of destructive power. Living space is being reorganized around "home". This study shows what the global spread of covid virus infections 19 (COVID-19) brought to social theory in 2020. The objective is to diagnose the impact and to present reflections on it in the following three perspectives:

More-than-human agency

COVID-19 highlights an inhumane actor called a virus as a symbiotic being that forms society together. This makes it inevitable to give the virus the ability to act and recognize it as a social actor, or 'theory citizenship'. In the face of phenomena that cannot be explained by modern humanism, human-to-human actors performing the production and transformation of the world with humans. One elastic and open theoretical stand is ever asked more urgently than ever.

More-than-social sociality

COVID-19 routinely visualizes new social images, which are different from classical images of society. If you analyze the term "social" of "social distance", it is not difficult to find that a society caught up in a pandemic is being redefined as a form of network, not as a shield, but as a form of risk and area. 'Sociality beyond' refers to a new sociality, which is not meant to be extinct, social relationships disappear, or human departures from society, but in a different form from 'social things' based on modern Western historical experiences, which simultaneously implies unknown possibilities and dangers.

More-than-individual subjectivity

COVID-19's characteristic of transmission through non-verbal leads to thinking of a new perspective actor model consisting of dispersed traces of infectious forces instead of modern individuals considered to be no longer divisible. The subject is a porous body thrown into material interaction in this pandemic situation and has the shape of a distributed flow of performance capabilities. 'Individual-above identity' refers to a theoretical position that values the physical, relational, and connectivity of human actors not captured by modern object concepts.

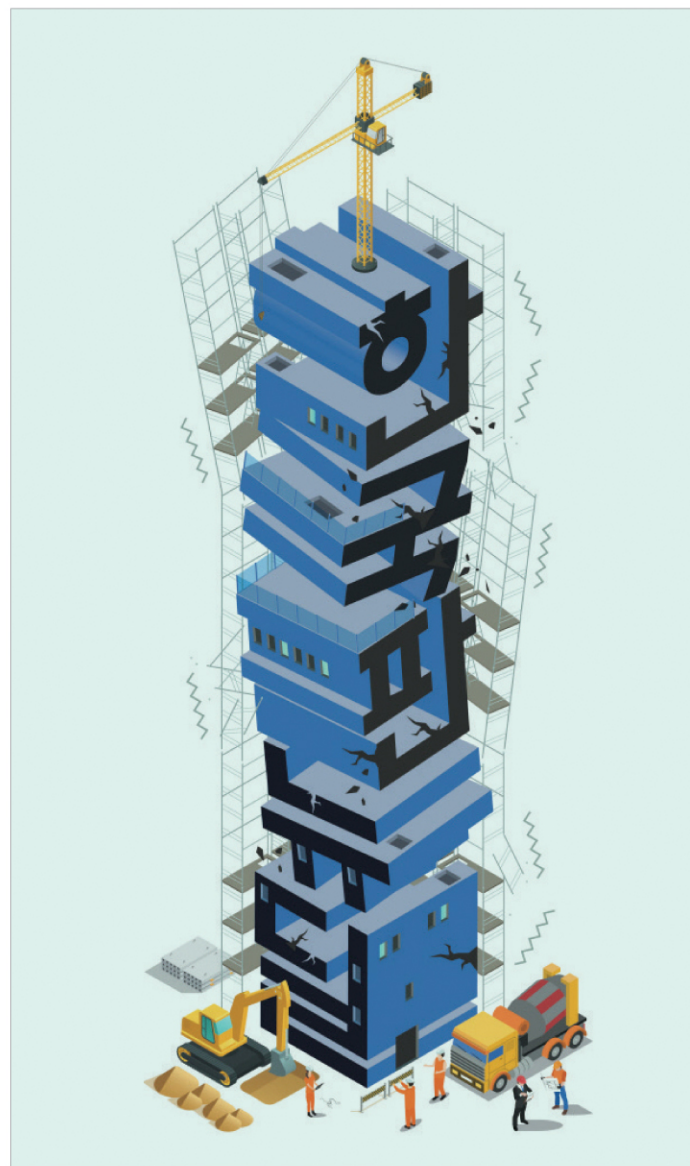
Comment

How is the reality we see enlightening us? Three themes were presented as tentative answers: the power of liver actors, the emergence of new social skills spread through risks and networks, and the hole-in-the-body representing the identity of the individual beyond. This gives direction to how we will form social theory beyond traditional behaviors, society, and individual notions.

Nam Seo Jin (1-6)

References

- Colin Williams, "Coronavirus: sociological and social policy perspectives," International Journal of Sociology and Social Policy, 31 July. 2020, emeraldgrouppublishing.com/journal/ijssp/coronavirus-sociological-and-social-policy-perspectives.
- Karl Thompson, "Sociological Perspectives on the Coronavirus," ReviseSociology, 10 Feb. 2020, revisesociology.com/2020/02/10/sociological-perspectives-on-the-coronavirus/.



The Corona 'New Deal' in Korea

Kim Jae Hyun introduces a policy announced by the Korean government designed to support recovery from the coronavirus-hit economy

Corona pandemics have brought economic recession around the world. It is said to be the biggest crisis since the Great Depression, and in fact, the economic loss caused by the Corona fandum is greater than that of the Great Depression. Of course, our country could not escape this crisis. The nation's various industries and companies are suffering severe losses while some are going bankrupt. Now that the nation's economy is facing a crisis that will collapse, what is our government doing to break this crisis? Today, I will introduce the Korean version of the Corona New Deal, one of the large-scale national projects.



What is Corona New Deal?

The New Deal was first implemented in the United States, and was pushed under the guidance of the 32nd President Roosevelt to overcome the Great Depression. The Corona New Deal is an economic innovation initiative that the Korean government will pursue over the next two to three years, and this economic innovation has been named the Korean version of Corona New Deal. To summarize the Corona New Deal simply, it is a project to create jobs and accelerate economic innovation based on digital technology. The basic framework is that the state implements large-scale national projects to create jobs and support the development of various industries, such as the New Deal of the United States.

Content

The Corona New Deal highlights three major innovations and ten major initiatives. The three selected areas of innovation are building digital infrastructure such as data, 5th generation mobile communication, and artificial intelligence, active development of non-face-to-face industries, digitalization of social overhead capital, etc.

The top 10 major initiatives

1. Strengthen data-period infrastructure
2. Expand data collection and utilization
3. Early establishment of 5th generation mobile telecommunication infrastructure
4. 5th generation mobile communication plus convergence and complex business promotion
5. Expanding AI Data and Infrastructure
6. Extend AI convergence by transcription
7. Creating a foundation for the spread of non-face-to-face services
8. Strengthen cloud and cyber safety nets
9. Digitalizing the deteriorated SOC(System On a Chip)
10. Establishing a digital logistics service system

Four principles were applied to the process of selecting the three major areas: focusing on digital-based projects, creating greater synergy with private investment, improving productivity and competitiveness in all areas of the economy, and having an impact on large-scale innovation projects.



Meaning

The Corona crisis is accompanied by changes in the economic and social structure, including simultaneous shocks, simultaneous contraction of demand and supply, and acceleration of non-face-to-face and digitalization, and is said to be pushing for a Korean version of the New Deal to take this situation as an opportunity. Analysts say that the Corona 19 incident has brought about a drastic change in the world's socio-economic structure, and at the same time, some analysts say that it will be impossible for all of us to return to the previous situation intact. Just looking at the situation in Korea right now, we are getting used to new experiences such as non-face-to-face distribution of goods, remote classes, and telecommuting, and at the heart of these experiences is the information technology infrastructure. This Corona New Deal is considered a timely project because there is a possibility that the Corona pandemic situation will become entrenched and a similar situation will occur in the future. And if you look at this policy from another point of view, it's an appropriate project in that it can serve as an excuse to create quality jobs for young people. Corona New Deal is expected to serve as a complement to the service sector, which has been relatively more damaged by the Corona fandum, especially for young people.

Controversies

There was a controversy over whether the government was seeking to institutionalize telemedicine as it included active development of non-face-to-face industries in the three major areas of innovation and creation of a foundation for the spread of non-face-to-face services in the 10 major initiatives related to the Corona New Deal. In response, the government denied it and responded that the non-face-to-face medical services promoted by the government were only related to non-face-to-face medical education projects.

Projects

We've looked at the Corona New Deal that the government is promoting, and now we're going to look at some projects that are actually being carried out.



First, it's fine drip technology.

In fact, the micro-water drop technology came from studying a new sterilizing spray. KAIST's research team studied sterilizing spray technology that can catch coronavirus while being harmless to the human body, and developed sterilizing spray technology that can catch coronavirus by making ultra-fine water droplets in large quantities. This technology utilizes a substance called hydroxylardical, which is a natural substance that is more sterilizing than conventional sterilization methods and does no harm to the human body. The research team published some of its research results in an international journal in April and has been conducting follow-up research since August with the support of the Corona New Deal project.

Second, smart city.

Smart City corresponds to the digitalization of social overhead capital, one of the three major areas of innovation. Smart City means that it is a city that allows citizens to enjoy convenient and pleasant lives by solving traffic problems, environmental problems, housing problems, and inefficiency in facilities caused by high-tech information and communication technologies. In October 22, the government visited Songdo Incheon, a leading smart city, to invest 10 trillion won in smart cities, create more than 150,000 jobs, and move to become the world's top smart city country. The announcement is also a pep talk for the Corona New Deal project, stressing that the Corona New Deal should be felt faster than anything else.

Third, electric cars.

At the 7th International Electric Vehicle Expo held in October, experts and officials from around the world discussed the trend of sustainable electric vehicle industry in the post-Corona era. Here, the director of the Automotive Aviation Division of the Ministry of Trade, Industry and Energy will invest a lot in the electric vehicle industry to innovate the green industry in connection with the Corona New Deal pushed by the Korean government.

Comment

So far, we have looked at Corona New Deal, one of the government's measures against the pandemic. The Corona New Deal is divided into three main categories: Digital New Deal, Green New Deal, and Employment Safety Net Enhancement. In any case, we hope that this Corona New Deal will revitalize the nation's industry and economy and create a variety of stable jobs.

Kim Jae Hyun (2-1)

References

- Dongwoo Kim, "South Korea's 'New Deal': An Example for Post-COVID Economic Recovery," Asia Watch Newsletter, 3 June, 2020, asiapacific.ca/publication/south-koreas-new-deal-example-post-covid-economic-recovery.
- Kim Soo-yeon, "S. Korea to focus on supporting economic recovery, preparing for post-pandemic era in 2021," Yonhap News, 17 Dec. 2020, en.yna.co.kr/view/AEN20201216003751320.
- Sohn Ji-ae, "Korean New Deal," Yonhap News, August, 2020, kocis.go.kr/eng/webzine/202008/sub08.html.



The global economy outlook after the Covid-19

Song Won Tae shares insights on the economic impact of COVID-19 across different territories and industries given by leading economists and experts from around the world

The COVID-19 pandemic shock has had a serious impact on the global economy and will remain there for a long time. The COVID-19 has wreaked havoc on the global economy in 2020. To contain the spread of the virus, many countries shut down their economies by halting the movement of people and goods in the spring of 2020, leading about one-third of the world's population to experience constrained life conditions due to these lockdowns. When jobs and firms are destroyed by economic crises, the economy loses skills and capacity that are hard to re-build. Consequently, the world economy contracted significantly.

Coronomics : the beginning of a new economic and financial order

German economist Daniel Stelter said, "A new era of economic policy has opened with COVID-19, which has directly hit the fragile economy on its way to recession," and called this economic policy "Coronomics." It is highly likely that inflation will return, and the country will intervene in the economy more actively than ever recently. After the Corona, the world will be greatly changed and it will be a new economic, financial and financial order. COVID-19 has shown that Asia will lead the world in the future and the Western world has lost much of its past leadership. He suggested labor growth, productivity (GDP per employment population), and measures to boost small and medium-sized enterprises.

Rising budget deficits add to the national debt

Professor John Gathergood, who has served as an expert adviser of household finance to the Bank of England, says that the government deficit will increase to levels not seen since the Second World War, and with it the national debt. In response to this, significant increase in government spending on support packages to consumers and businesses is necessary. With vaccinations for the virus possibly in sight, it is time to ponder an effective economic exit strategy into the post-COVID era.

Two divergent exit strategies of the U.S.

To gain more insight on the road ahead, Aizenman and Ito(2020) compared two divergent US post-COVID economic strategies. The US government could delay implementing needed macroeconomic adjustments and gamble for a resurrection of the economy while continuing to run lax monetary and expansionary fiscal policies. Alternatively, the administration could adopt a two-pronged policy of reallocating the fiscal efforts first, while aiming at reaching a primary surplus over time. Specifically, it could retrench from expenditures oriented towards COVID-related challenges, and move towards expenses with a high social payoff (upgrading education, investing in medical infrastructures, etc.). Changes in U.S. economic policy are crucial because the choice of the U.S., the core of the global financial system, somehow has an overwhelming impact on the global economy.

Proper role for governments to respond to crisis

The legacy of the COVID-19 pandemic will have long lasting, possibly irreversible, effects on the economy that the government of the world will have to face over coming years. Danny Rodrick, professor of international politics and economics at Harvard University's Kennedy School, said the global economy will continue to expand its role, regress hyper-globalism, and slow economic growth after the COVID-19. Developed countries are taking unprecedented fiscal measures in response to the economic crisis caused by the COVID-19. The Group of 20 major economies have announced stimulus measures worth \$11 trillion so far. The world has experienced the COVID-19 incident and realized that "government capabilities for crisis response and protection of the people" are important. The crisis has raised calls for universal health insurance, stronger labor market protection and domestic supply chain protection related to core medical equipment.

Global cooperation as our only choice

Professor Danny Rodrick introduced global public health, international environmental consensus, and tax havens around the world in the field of international cooperation, saying that more sensible and less involved economic globalization should be achieved in order for international cooperation to succeed. To quote Professor Rodrick, the fate of the global economy does not depend on what the virus does, but on how we respond. Although the world is suffering from a stagnant economy due to COVID-19, people hope that international cooperation will be strengthened to stabilize the economic situation of each country as soon as possible.

"The fate of the global economy does not depend on what the virus does, but on how we respond."
- quoted by Danny Rodrick

Song Won Tae (I-1)

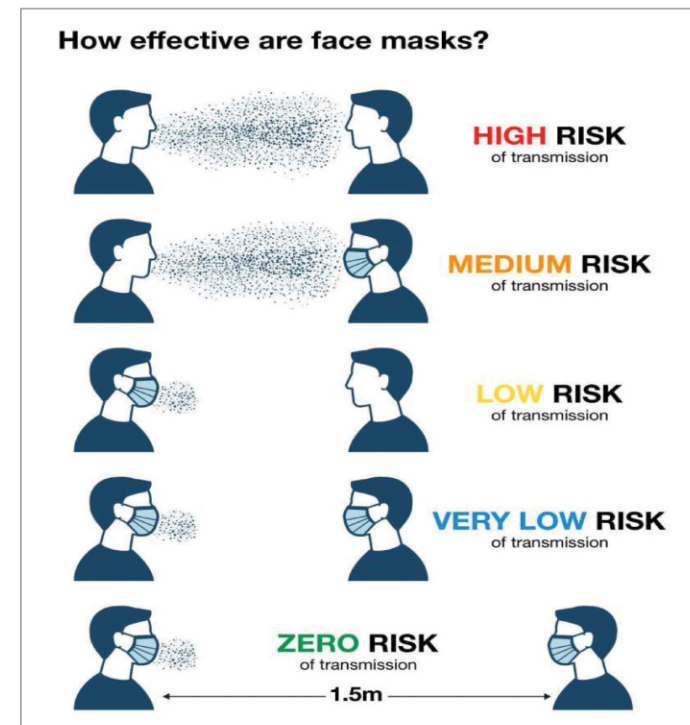
References

- Dani Rodrik, "The World After Coronavirus: The Future of Global Trade," Harvard Kennedy School, 2 June, 2020, hks.harvard.edu/centers/mrcbg/programs/growthpolicy/world-after-coronavirus-future-global-trade-dani-rodrik.
- Elisabeth Krecke, "Relevance beyond the crisis: The future of coronomics," GIS Reports Online, 15 May, 2020, gisreportsonline.com/relevance-beyond-the-crisis-the-future-of-coronomics/economy/3164.html.
- Joshua Aizenman, Hiro Ito, "Post-COVID-19 exit strategies and economic challenges for emerging markets," Vox, 27 Oct, 2020, voxeu.org/article/post-covid-19-exit-strategies-and-economic-challenges-emerging-markets.



The principle behind face masks

The wearing of face masks in public places is mandatory. Kwon Ha Jun and Song Ji Won explain how masks prevent respiratory infections during epidemics and teaches the proper steps to wear them.



Viruses are transmitted through coughing or sneezing as airborne aerosols, and viruses that enter people's eyes, nose and mouth stick to cells and multiply within your body. So a mask is needed to prevent the virus as much as possible. It's been 10 months since the outbreak of Corona and it is compulsory to wear a mask in almost all public spaces. As masks became very important let's find out about how it works.

Dental masks

Currently, the dental mask used by many people is made up of only fiber tissue, so not only yellow dust but also fine dust is not blocked. Yellow dust masks can block more than 80 percent of fine particles about 0.6 um size on average. The structure of fine dust mask filter is divided into outer skin, primary filter, electrostatic filter, and inner skin. The outer skin is the outermost non-woven cotton, which filters out fine dust first. The primary filter primarily captures large dust and also stiffens the model compared to the inner, outer, and capacitive filters. An electrostatic filter is a filter that effectively controls fine dust by using static electricity. Finally, the innermost part of the innermost skin, the surface that touches the skin, is the lining that was tested for skin irritation.

KF94 Mask

It is recommended that many recently KF-certified masks should be used to prevent the virus. KF stands for Korea Filter and is a mask that recognizes fine dust blocking function authorized by the Korean government. KF94 means blocking more than 94% of the average particle size of 0.4um. The KF94 mask has positive and negative poles in each of the dusts in the atmosphere, so the anode sticks to the cathode and falls on the floor as the particles become heavier. The principle is that the meltblown (MB) in the mask gives an electric charge to generate static electricity, the amount of dust is attached to the cathode of MB, and the cathode of the dust is forced to adhere to the anode of MB and collects fine dust from fine dust to ultrafine dust.

How to properly wear a mask

From now on, we're going to talk about the correct way to wear a mask. Before we start, it is recommended to wear it when there are other people around public transportation, events and gatherings. However, cloth masks or masks with exhalation valves or porcelains are not recommended for controlling the source of infection. Don't use a medical mask either. Currently, surgical and N95 quarantine masks are essential supplies that must be stored for medical personnel and other emergency services. Also, the mask should not be worn by children under the age of 2 or by persons who are having difficulty breathing, unconscious, powerless, or unable to remove the mask without assistance. The first step to wear mask correctly is to wash your hands before wearing masks. Next, cover your nose and mouth with a mask and fix it under your chin. Then, place it comfortably on the side of your face. Finally, make sure you can breathe comfortably with your mask on. When you return home, untie the strap behind your head or pull the hook on your ear. At this point, you should only touch the rings or straps on your ears. Be careful not to touch your eyes, nose and mouth when you take it off, and wash your hands immediately after you take off your mask. Keeping only these points will reduce the threat of the virus a lot.

Kwon Ha Jun (I-11)
Song Ji Won (I-1)

References

- Lisa Lockerd Maragakis, "How to Properly Wear a Face Mask: Infographic," Johns Hopkins Medicine, 11 Sep, 2020, hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/proper-mask-wearing-coronavirus-prevention-infographic.
- Trisha Greenhalgh, "Face masks for the public during the covid-19 crisis," BMJ, 9 April, 2020, [bmj.com/content/bmj/369/bmj.m1435.full.pdf](https://www.bmj.com/content/bmj/369/bmj.m1435.full.pdf).



What we can do to cut poverty caused by the pandemic

Global poverty has always been one of the very worst problems that the world faces today and Song Won Tae brings our attention to how rapidly the percentage of the poorest people over the world is increasing after the corona virus incident

The economy after the COVID-19 incident has been on the downward spiral. The declining economy situation is not just a story for companies and businesses. The main characters of this sad and devastating story of the contagious disease are actually the people who suffer from hunger and poverty. The number of people who are threatened by famine surged after the incident.

The impact of COVID-19 on global extreme poverty

Last October, The World Bank reported that the percentage of the poorest people all over the world increased dramatically after the corona virus incident. The World Bank predicted that the world's poorest population would reach 615 million as of the end of 2020, but estimates it to be between 703 million and 729 million since the outbreak. Also the Wall Street Journal quoted the WB's survey of global poverty and reported that COVID-19 has left 88 million to 114 million more people in extreme poverty. The British aid group Oxfam called for a package of nearly \$160 billion in immediate debt cancellation and aid to fund a global emergency and public health response to help prevent millions of deaths as a result of the Coronavirus. Oxfam said their proposed \$160 billion would be spent on people in poor countries and warned that more than 40 million people would die from COVID-19 unless they took 'emergency action' for these countries.

Corona virus, an epidemiologist named Duncan Maru suggested ways to prevent and help the poor. He said that making plans for the expansion of personal protective equipment(PPE) and testing capacity is necessary. Relatively poor countries do not have the money or resources to develop their own protection equipments so the countries with the abilities should support them. Also he suggested that hospitals everywhere should increase their capacity. As the number of people infected grows, more hospitals are going to be in need. He also reminded that when vaccines are developed, fast and fair distribution is essential. Distribution of vaccines only in the wealthy countries is unacceptable.

Comment

Unbelievably large amount of people are suffering from COVID-19. I think all countries and all people should share and oblige in order to overcome the devastating and catastrophic situation of the Corona virus. The reason is that it is difficult to overcome the disaster of COVID-19 if the world living in a global society does not join forces and only thinks about its own safety.

Song Won Tae (1-1)

References

- Duncan Maru, Sabitri Sapkota, "Coronavirus is coming for the world's poor. Here are six ways to help." World Economic Forum Agenda, 23 Mar. 2020, [trade4devnews.enhancedif.org/en/op-ed/coronavirus-coming-worlds-poor-here-are-six-ways-help](https://www.weforum.org/agenda/2020/03/coronavirus-is-coming-for-the-worlds-poor-here-are-six-ways-to-help/).
- Elizabeth Howton, Mark Felsenthal, "COVID-19 to Add as Many as 150 Million Extreme Poor by 2021." The World Bank, 7 Oct. 2020, [worldbank.org/en/news/press-release/2020/10/07/covid-19-to-add-as-many-as-150-million-extreme-poor-by-2021](https://www.worldbank.org/en/news/press-release/2020/10/07/covid-19-to-add-as-many-as-150-million-extreme-poor-by-2021).

World Bank's survey of global poverty and reported that COVID-19 has left 88 million to 114 million more people in extreme poverty

How to fight the virus in the developing world

As a way to solve the problem of the poverty issues due to the



Tracking the critical moments of Covid-19 in Korea

South Korea saw its first confirmed COVID-19 case on January 20 and there were some critical points which caused a rapid transmission of the virus. Kim Kang Min and Song Woo Jin reminds us with some major events that were surfaced by the media

Shincheonji and the coronavirus

First internal corona appeared in Jan 20. Covid's infectors are increasing quickly. But, there had not been serious cognitions of Covid-19 in Korea. However situation was changed by the Shincheonji accident. After this accident, the number of infected people in Korea has reached thousands. So, this accident caused chaos across the country. After the incident, many people started buying masks in bulk. For this reason, the quantity of masks became insufficient. With more people unable to buy masks, the government has allowed people to buy two masks for 1,500 won a week.

Itaewon club outbreak

A mass infection occurred in Itaewon club. It was a sign that the second Covid-19's spread had started. I think this incident obviously has made the situation worse. But on the other hand, I think it has served as a wake-up call to people.

Mask rationing system

After the issue of resale and hoarding of masks was resolved, the mask rationing system was abolished. The mask rationing system was created because of people who bought masks in large amounts and resold them at high prices, but was abolished on June 1 as the supply of masks increased.

Remaining level 1 social distancing

In June, social distancing step 1 was implemented as the daily number of confirmed cases was below 50. Although the effects of the spread of coronavirus in Itaewon clubs remained, the daily number of confirmed cases stayed below 50 in June. Because the number of confirmed cases was small and social distancing was still in step 1, so there was no significant damage to the self employed. Until June, there was no trigger for a corona widespread. Situations seemed to be getting better. With stimulus money and support for the self-employed, the economic situation also seemed to recover little by little.

Lee Man-Hee, founder of Shincheonji, arrested for obstructing coronavirus fight

In August 1, the leader of Shincheonji Lee Man Hee was arrested for causing the widespread of corona and obstructing the government's disinfection activities. Daegu is demanding compensation because Shincheonji contributed to the widespread of the coronavirus in Daegu, and it inflicted great economic damage.

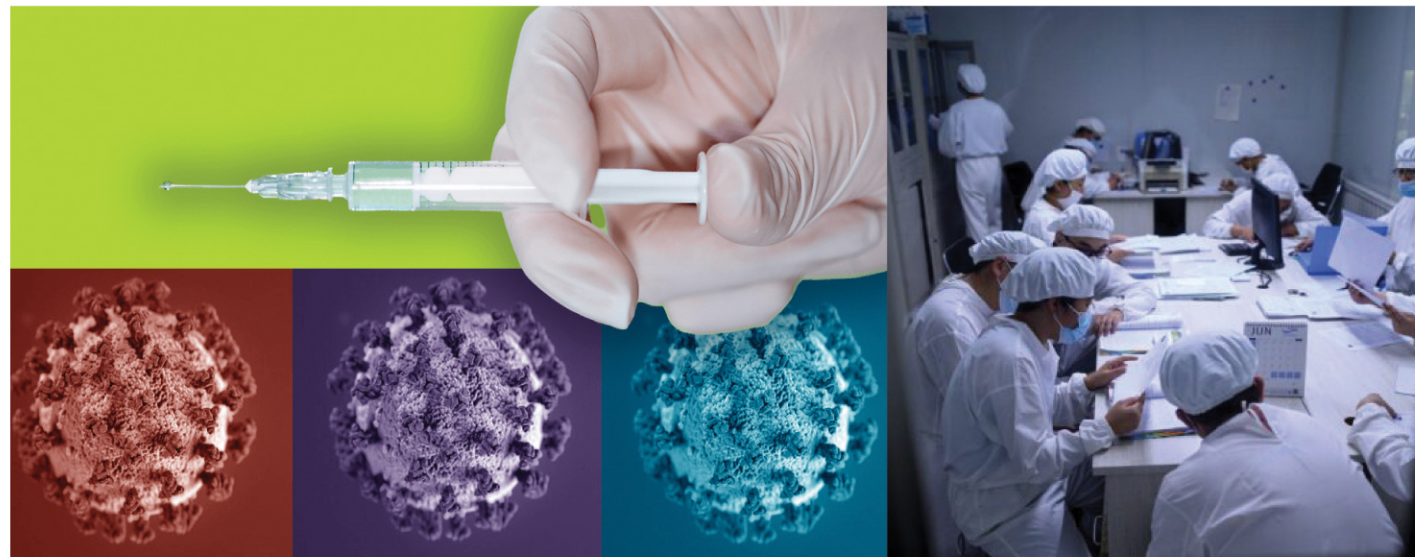
Another church-linked outbreak, Sarang-jeil

At the end of August, a mass infection occurred at Sarang-jeil Church. After the massive spread of coronavirus in Sarang-jeil Church, the daily confirmed number of people increased to hundreds, and social distancing level 2.5 was implemented. In social distancing level 2.5, the use of restaurants and cafes were partially restricted, and many self employed facilities such as private academies, billiard halls, and PC rooms were suspended. With most of the self-employed facilities being suspended, the self-employed have suffered heavy economic damage. Many daily workers and part time workers have lost their jobs due to fewer places to work.

Kim Kang Min (2-3)
Song Woo Jin (2-3)

References

- Hwang Ye-rang, Song Gyung-hwa, "Cluster infection originating in Seoul's Sarang Jeil Church spreads nationwide." Hankyoreh, 19 Aug. 2020, [english.hani.co.kr/arti/english_edition/e_national/958431.html](https://www.hankyoreh.com/en/article/20200819-sarang-jeil).
- Kim Young Woo, "As it happened: COVID-19 timeline and event tracker." Johns Hopkins University, 9 Mar. 2020, [visualisingkorea.com/2020/03/09/coronatimeline/](https://www.visualisingkorea.com/2020/03/09/coronatimeline/).
- Staff reporters, "S Korea arrests church leader for obstructing coronavirus fight," Aljazeera, 1 Aug. 2020, [aljazeera.com/news/2020/8/1/s-korea-arrests-church-leader-for-obstructing-coronavirus-fight](https://www.aljazeera.com/news/2020/8/1/s-korea-arrests-church-leader-for-obstructing-coronavirus-fight).



Covid-19 vaccine : when and where it will be made

While governments worldwide are working with the timeline to provide billions of people with immunity to the new coronavirus, students came with an update on when and where the vaccines will be made

Definition and characteristics of vaccine

Vaccines are medicines that give humans and other animals acquired immunity to certain diseases or pathogens. Vaccines have a similar structure to the antigenic part of microbial pathogens that cause disease but they are not pathogenic. Getting vaccinated will activate our body's immune system, which will allow our body to respond quickly to future pathogens.

Principles of vaccinations

The body's immune response is largely divided into congenital and acquired immunity. Among them, acquired immunity has many characteristics, one of which is immune memory. The memory of acquired immunity remembers information about the pathogen that had previously invaded the human body, enabling faster and stronger immune responses to future infections of the same pathogen. This memory operation is caused by memory T lymphocytes and memory B lymphocytes and vaccines can use these memory actions to prevent disease.

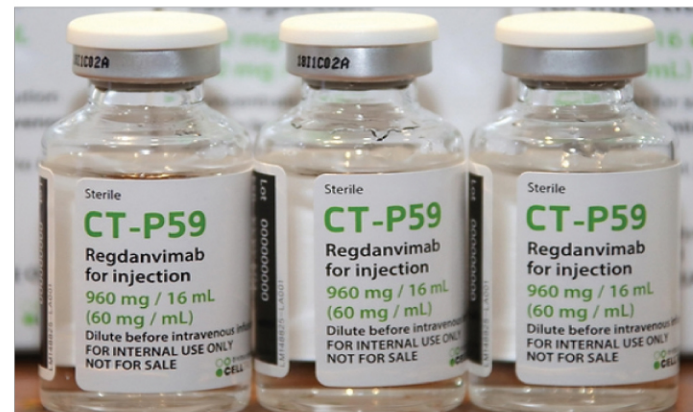
Korean company Celltrion is approved for clinical trials of COVID-19

The COVID-19 vaccine is already in effect in the U.S. but Korea has yet to approve emergency use as there may be many side effects. As a result, attention is being paid to when the COVID-19 vaccine will be approved in Korea. On the 26th, Celltrion announced that it will start recruiting patients after receiving approval from the Ministry of Food and Drug Safety on the 25th of August for the first phase clinical trial plan for mild patients of the COVID-19 antibody treatment. The first phase of clinical trials in Korea, which was approved this time, focuses on evaluating the safety, resistance, and virus neutralization capabilities of CT-P59 (the antibody cure of COVID-19) patients in Corona-19 mild patients, and will cooperate with a number of medical institutions such as Incheon Medical

Center, Gachon University Gil Hospital, and Inha University Hospital. At the end of July, the company received approval from the UK's Drug and Health Care Products Regulatory Agency and is conducting global clinical trials on mild patients and plans to complete the clinical trials in Korea early, which will be conducted based on the same clinical design. The company plans to carry out the second and third phases of global clinical trials for mild patients and the third phase of preventive and secondary cases to secure interim results for these clinical trials by the end of this year. To that end, we are also closely consulting with the Ministry of Food and Drug Safety and European countries.

The Future of CT-P59

Since the short-term vaccine effect of CT-P59 can also be expected, it believes that it can greatly contribute to the suppression of community propagation and stabilization of Pandemics. As soon as the CT-P59 is approved for use, the company will begin full-scale commercial production in September to enable the mass supply of the CT-P59. To



that end, the company is preparing to supply CT-P59 without a hitch, considering the production capacity adjustment for next year as well as inventory and production plans for existing products.

Results of the Celltrion's animal clinical trials

In order to be approved for clinical trials on humans, the company conducted various types of animal clinical trials. According to data distributed by the company, the efficacy test for ferrets showed a marked improvement in the level of inflammation in the lungs and a decrease in the amount of viruses by one-hundredth. Subsequent hamster tests, which were conducted in a similar way, found that the amount of virus decreased to less than one-nineteen-thousandth and that the appearance of the lungs observed visually after the autopsy showed a marked decrease in inflammation compared to the control group.

Other companies working on coronavirus treatments

Let's look at the status of vaccine development as of June 29. Except for Genexine, which is already undergoing clinical trials, companies that have started animal testing include G+FLAS Life Sciences, SillaGen, SK Bioscience. The COVID-19 vaccine is already in effect in the U.S. but Korea has yet to approve emergency use as there may be many side effects. As a result, attention is being paid to when the COVID-19 vaccine will be approved in Korea.

HuVet Bio

One of the notable places is Huvet Bio. "We have received technology from the Korea Life Insurance Corporation on vaccine candidate materials and are developing vaccines jointly with Optipharm," said the CEO, Jung Hyung-hwa. The vaccine of Huvet Bio is made of recombinant protein as an antigen. "Reunion protein is a proven technology that has been used the most in vaccine production. We understand that DNA vaccines have never been successful in commercializing them in humans. We are currently conducting animal experiments using hamsters. We aim to enter clinical trials for people early next year," he explained.

HK inno.N

Another company, HK inno.N, is supported by the Korea Research Institute of Chemical Technology. It has received technology transfer and is conducting joint research on vaccine candidate materials developed by the CEVI(New Virus) Convergence Research Group of the Korea Chemical Research Institute. It signed a vaccine research contract with the International Vaccine Institute on March 5 and is developing a Corona 19 vaccine using a virus carrier.

Boryung BioPharma

This company is currently studying whether the SARS vaccine, developed

with its overseas partners, can be used as a Corona 19 vaccine. Boryung BioPharma's SARS vaccine is currently undergoing phase I clinical trials.

SK Bioscience

In the case of SK Bioscience, it carried the Centers for Disease Control and Prevention on its back. The Korea Centers for Disease Control and Prevention was selected as a priority negotiator for the "Corona 19 Subunit Vaccine Candidate Development Project" announced by the Korea Centers for Disease Control and Prevention. Currently, SK Bioscience succeeded in expressing Corona 19 vaccine candidate material in March and started animal testing, and aims to enter clinical trials by September.

Comment

In 2020, the advent of the Corona virus has threatened the safety of people around the world, paralyzed the economy and caused a lot of damage. Due to this effect, many problems such as economic life also became problematic. However, apart from all the research and development going on for an effective vaccine, Korea quickly solved the problem and succeeded in also developing simple test kits. Even before the virus spread to Korea, KCDC and several Korean companies started to work together to develop coronavirus test kits in January this year. Thanks to their great efforts, many Korean companies finally made very accurate and fast test kits and Korea was able to well control the outbreak of coronavirus in Korea. Korean companies exported coronavirus test kits worth only three-thousand dollars in January, but surprisingly, Korean companies exported coronavirus test kits worth more than two-hundred million dollars in April alone. Watching this situation, we thought that we want to become someone who can be responsible for the safety of many people in the field of life sciences and contribute greatly to the development of technology.

Kum Jun Su (1-1), Lee Jae Won (2-8), Lee Jung Hwan (2-9), Lee Song Won (2-9), Song Chan Min (2-12)

References

- AskMayoExpert. COVID-19: Vaccination. Mayo Clinic; 2020.
- Andrea Kane. "Monoclonal antibodies: A Covid-19 treatment people might not know about." CNN, 16 Dec. 2020, edition.cnn.com/2020/12/16/health/monoclonal-antibodies-coronavirus-access/index.html.
- Kim Chan-hyuk. "Korean companies prepare for Covid-19 vaccine cold chain." Korea Biomedical Review, 18 Dec. 2020, koreabiomed.com/news/articleView.html?idxno=9961.
- Sophia Eminson, Donna Curran. "Celltrion Submits Application for Conditional Marketing Authorisation of Its COVID-19 Treatment Candidate CT-P59 to the Korean MFDS." Business Wire, 29 Dec. 2020, businesswire.com/news/home/20201228005332/en/Celltrion-Submits-Application-for-Conditional-Marketing-Authorisation-of-Its-COVID-19-Treatment-Candidate-CT-P59-to-the-Korean-MFDS.

Monoclonal antibody treatment could be a bridge to the vaccine

The competition to develop the COVID-19 vaccine is escalating worldwide, while on the other hand, the antibody development competition is taking place. According to the journal Science on the 14th, scientists are currently conducting clinical trials on danclon antibodies that are believed to be able to treat COVID-19, and the results are expected to be announced within this year. Amid the news of vaccine development, news has been reported that the development of danclon antibody treatments with strong therapeutic effects is progressing faster than vaccines, which is good news for patients.

Treatable without cell damage

When antigens such as viruses penetrate, the immune system pays attention to the very small molecular structure of an antigen called epitope. There are numerous epitopes in the antigen. B cells in the immune system receive information about antigens through T cells to produce antibodies, which produce danclon antibodies that recognize different epitopes in one antigen and monoclonal antibodies that recognize only one epitope in one antigen. Dual monoclonal antibodies are pure antibodies that respond to only one epitope, and when injected into a patient, normal cells can be treated more perfectly without damaging them.

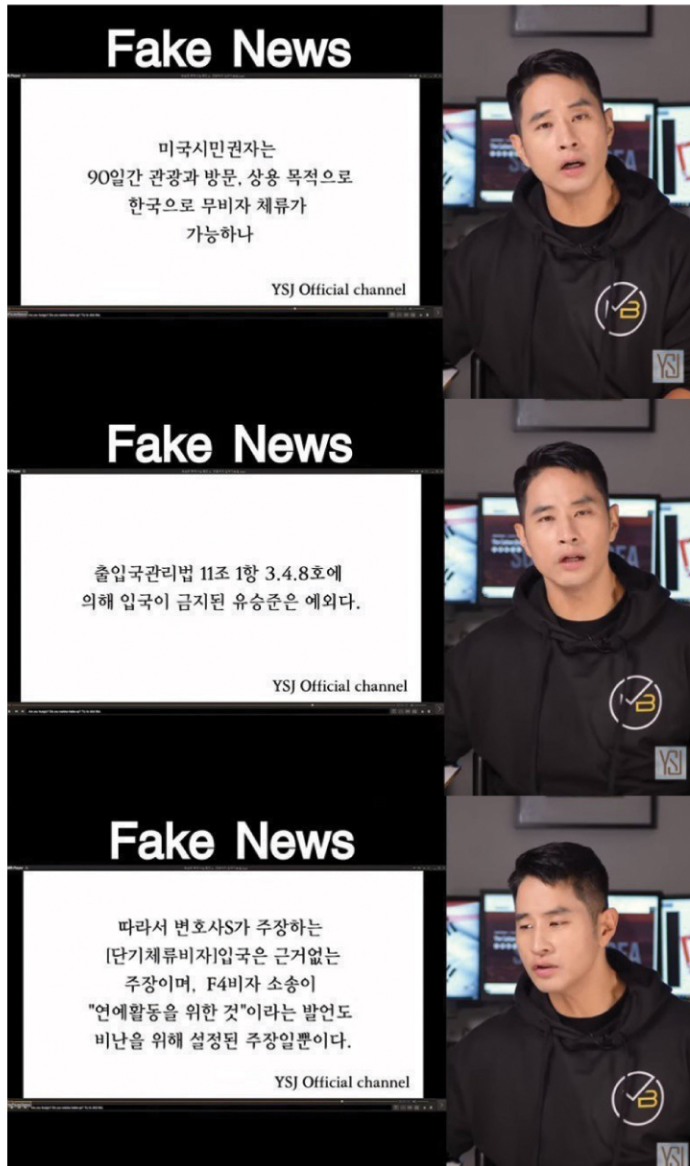
Quick testing to get to completion

Scientists have been paying attention to the development of antibody treatments shortly after COVID-19 broke out. In particular, various efforts have been made to develop a cure for monoclonal antibodies that can fight new viruses. Eli Lilly, the first pharmaceutical company to start its first clinical trial with on May 29, is conducting safety tests through its partners, Junxi Bioscience of China and Regeneron of the United States. In particular, Regeneron is developing a monoclonal antibody hybrid treatment that can treat COVID-19. The plan aims to provide comprehensive treatment for patients with the virus by combining various functions of monoclonal antibodies. Researchers believe that since most single-clone antibodies neutralize spike proteins that are a link to human penetration on the surface of the new virus, mixing them could achieve a wide range of therapeutic effects, as in Ebola treatment.



Steve Yoo's video with netizen's reactions

Kim Roh Bin writes about the fierce remarks Steve Yoo gave against the so-called 'Yoo Seung-jun Prevention Act' initiated by a Democratic Party lawmaker



Steve Sueng Jun Yoo is a hot potato these days for his Video on YouTube. Steve Yoo was an entertainer in Korea from the late 1990s to the early 2000s, when he was a singer and a multi entertainer, a top star loved by almost everyone for his colorful dance, outstanding singing and speaking skills. He was an entertainer full of positive images to the extent that he was nicknamed "Beautiful Youth Yoo Sueng-Jun" as he appeared in a public service campaign speaking of his adolescence. However, in January 2002, he attempted to evade military service by receiving U.S. citizen ship ahead of his enlistment. This incident caused widespread outrage and lated banned him from entering Korea by the Ministry of Justice and the Military Manpower Administration of South Korea.

Eighteen years later, Steve Yoo is still using all possible means to enter Korea, including public opinion campaigns and legal responses. He sometimes won favorable rulings, but it seems unlikely that he will be allowed into the country. On December 19, 2020, Steven yoo posted a video of his objection on YouTube to the so-called "Steve Yoo Prevention Act" proposed by Rep. Kim Byung-joo. The bill prevents men from dodging military service due to a change of nationality, and prohibits entry of men who have lost or left Korean nationality without fulfilling their military service obligations.

In the video clip, he claimed that children of public officials were far more wrong than his own evasion of military service, and speaking about current administration's policy toward North Korea and the manipulation of state affairs by former president Park Geun-Hye, he told that the impeachment of Park Geun-Hye was a "People's Court." He also condemned the "candlelight vigils" as a bloodless coup d'etat. He also claimed that the current government is a communist regime, defining the restricted assembly and worship by a certain scale at the level of COVID-19 quarantine as a religious crackdown. He made statements such as insisting strongly on the conspiracy for the election fraud in the U.S. presidential election and the 21st National Assembly of South Korea. Netizen's reaction to this video is very cynical. Most of the videos that news about Steve Yoo's video have criticism and derisive comments.

Kim Roh Bin (I-1)

References
- Cho Hyun-joo, "Yoo Seung-jun, 'I am a public enemy' in the 'Yoo Seung-jun Prevention Act' initiative," World Today News, 20 Dec. 2020, world-today-news.com/%EC%82%AC%ED%9A%8Cyoo-seung-jun-i-am-a-public-enemy-in-the-yoo-seung-jun-prevention-act-initiative/.



The recent status of Korea's aviation business

Song Ji Won brings readers the latest news on the Korean aviation industry as it appears 'aerospace' is a primary area to lead future growth of our economy

Successful development and future prospects of Korean Fighter Aircraft

Controversy is heating up over the direction of the Korean Fighter Experimental. Indeed, domestic development of fighter jets is necessary, and it possible? Hyundai's fighter jet development is based on national defense, but its economic aspects are becoming important. The international joint development adopted by the Korean fighter jet project is an export method if successful, so it is economically advantageous to secure production volume. As can be seen in the export of the T-50, it can predict a large market centered on Southeast Asia as well as Indonesia, a joint fighter development partner. Some prefer direct purchase of fighter jets in consideration of development costs and risks, but as seen in the F-15K, operating and maintenance costs, which cost more than the purchase cost, are a big burden on the Air Force budget, and are limited in terms of operational operation, such as limited mounting and compatibility of domestic development equipment. Considering the fact that the KF-16 fighter jet's performance improvement project, which was introduced as license production, is drifting due to delayed decision-making by the U.S. government and production companies, and that the domestic development and operation of Korean-style fighter jets is expected to reduce operational maintenance costs and self-reliance in technology essential for national defense, the development of fighter jets must be carried out in Korea. Then can development succeed? Twenty years ago, when we were preparing to develop a T-50 supersonic trainer system, we were technically in a bad situation to develop a military aircraft with supersonic attack capability. However, it spent 2 trillion won on development despite tough economic conditions supported by the International Monetary Fund, and now it is a country that exports supersonic aircraft. The current core technology level of South Korean fighter jets has identified 64 core technologies that are essential for developing mid-range fighter jets, and 21 of them will be transferred from the U.S. through trade-offs between the F-X 3rd project. However, the transfer of four technologies, including AESA radar integration technology, has not been approved, requiring independent development in Korea or securing technology through third countries. At the heart of the controversy, the AESA radar is a state-of-the-art equipment that enables air warfare and ground strikes, which can be called the "eye of fighter jets." Since 2006, the Agency for Defense Development has started application research to develop AESA radars for aircraft and has developed transceivers and receivers, and is currently developing the first stage of testing to expand its functions. In order to complete the second phase of development scheduled by 2025, software and other Tribal technologies will be secured through technical cooperation with third countries. Given that international co-development and cooperative development of fighter jets as well as civilian aircraft are common methods of development, and that countries are stepping up technological cooperation to reduce development risks, it is believed that cooperation in technologies between radar-related countries will be sufficient. The F-35 is under international co-development, including Britain, Italy and Sweden, and not even the United States is developing fighter jets only with its own technology. Considering the technical skills and technical personnel accumulated through the development of KT-1, T-50, F/A-50 and Surion helicopters, and the fighter jet market including Korea and Indonesia, the successful development of Korean fighter jets is expected.

The development of aviation in the military

South Korea's military is set to develop ultra-high-speed missiles that the U.S., China and Russia are competing for. It is also conducting research to develop an ALCM (Air-Launched Cruise Missile), which is considered one of the top three nuclear umbrella forces, along with intercontinental ballistic missiles and submarine-launched ballistic missiles. The South Korean military plans to equip these state-of-the-art strategic missile weapons with the KFX, which will be deployed in 2026. According to a government official on Thursday, the military plans to discuss with the Agency for Defense Development to develop ultra-high-speed guided missiles to be installed in the KFX. The speed of the hypersonic guided missile reaches Mach 5, more than twice as fast as the existing supersonic guided missile. If fired at the North Korean command in Pyongyang, 250 kilometers above Seoul, it can be reached in one minute and 15 seconds. The criteria classified as hypersonic missiles must be applied at least at Mach 5. If ultra-high-speed guided missiles are developed, they will become the world's fourth-largest developer after the U.S., China, and Russia. The military's move to develop ultra-high-speed guided missiles ranging from Mach 5 seems to be a counter-offensive, as well as a check on North Korea's move to develop strategic weapons, as well as the active development of major powers around the Korean Peninsula. In 2016, China already developed the ultra-high-speed ballistic missile Dongfeng-17, which boasts a speed of Mach 10, and introduced it at a military parade marking the 70th anniversary of its founding in October last year. Russia's ultra-high-speed technology was applied to its cruise missile "Zircon" in 2017, its air-to-surface missile "Kinsal" in 2018, and its ICBM "Avantgarde" in 2019. The U.S., which entered the competition belatedly, plans to apply ultra-high-speed technology to missiles through the X-51A test, a supersonic drone. At the same time, the military has begun developing ALCM that can technically be equipped with nuclear warheads. The ALCM in the U.S. is a cruise missile equipped with a long-range strategic bomber B-52 or stealth strategic bomber B-2. If the ALCM development is successful with South Korea's own technology, the military's war deterrent posture can be considered to be strengthened in that it has secured a weapons system that can contribute to the U.S. nuclear umbrella operation in case of an emergency. Meanwhile, in February last year, the Joint Chiefs of Staff established a long-term plan to develop supersonic air-to-air guided missiles at the 326th Joint Chiefs of Staff meeting. The supersonic air-to-air guided missile has a speed of Mach 2.5 and a range of 250 km. The plan is to equip 3,000 pounds. Based on this technology, the military is expected to develop ultra-high-speed missiles.

Song Ji Won (I-1)

References
- Missile Defense Project, "South Korea to Develop Air-Launched Cruise Missile," Missile Threat, Center for Strategic and International Studies, July 13, 2018, missilethreat.csis.org/south-korea-to-develop-air-launched-cruise-missile/.
- Mike Yeo, "South Korea receives engines for future fighter jet," Tech Watch, 8 June. 2019, defenseneews.com/industry/techwatch/2020/06/08/south-korea-receives-engines-for-future-fighter-jet/.
- Chris Khang, "Aerospace industry as Korea's growth engine," The Korea Times, 8 Dec. 2018, koreatimes.co.kr/www/biz/2019/05/602_169498.html.



Abuse claims rocking the Korean sports industry

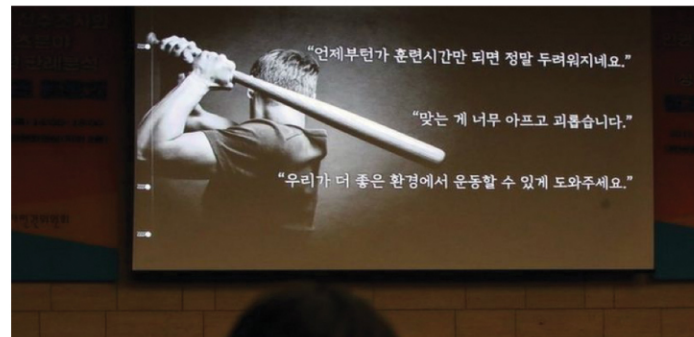
Sports can unite and inspire, but it can have negative impacts too – as a future international lawyer, Park Jun Seo addresses the human rights risks of sport

“Win at all costs”

As late Choi Sukhyun as well as Shim Sukhee acknowledged that there had been assault and battery in sports industry; abuse in it became the talk of the public. Korean sports industry is based on Elite Sports which relies heavily on athletes who started playing at a young age. The goal of it is winning. Since they train intensively on a small number of elite athletes from childhood, they are more likely to perform better than those who started training later. Coach commits assault and battery in the name of maintaining discipline in the team community and maximizing the effectiveness of the training. Of course, they perform better than they used to because of the harsh training from violence. However, it is temporary. Individual athlete’s human rights is being trampled.

Fundamental reason of athlete human rights being infringed

What is the fundamental reason of the athlete human rights being infringed? Elite Sports which is based on the maximization of competition that “Winner takes it all” is one of the main causes of it. Coach does everything by any means in order to achieve results. Their means to make athletes train is violence. In addition, according to the 2018 Ministry of Culture, Sports and Tourism audit data by Kim Young Joo from the assembly, in the past 5 years, among 860 disciplines committed by sports organizations due to corruption or violence, 323 cases were reinstated or re-employed. As they are able to return to the industry, it may recur and punishment is also a slap on the wrist.



What should we do to save athletes from violence?

There is a lack of awareness of human rights. Athletes are forced to prioritize the country rather than themselves and their performance rather than human rights. We must strive for their awareness of human rights. Although there are report centers at the ‘Ministry of Culture, Sports and Tourism’ and the ‘Korean Sport and Olympic Committee’, most of the athletes are not aware of those and report rate is low. Moreover, as announced on July 13 by the ‘Korean Sport and Olympic Committee’, it is urgent to introduce a one-strike system which will expel the coach, once they are proved with performing assault and battery.

Park Jun Seo (1-8)

References

- Alexis Hearnden, Ian Brownhill, “Five Measures to Protect Athlete Human Rights,” Sport Resolutions, 25 Nov. 2020, sportresolutions.co.uk/news/view/five-measures-to-protect-athlete-human-rights.
- Mary Harvey, “Putting respect for human rights at the heart of sport,” Open Global Rights, 21 Feb. 2019, openglobalrights.org/putting-respect-for-human-rights-at-the-heart-of-sport/.
- Mary Harvey, “Athlete Abuse webinar: Practical solutions for sports governance,” Centre for Sport and Human Rights, 19 Nov. 2020, sporthumanrights.org/en/resources/athlete-abuse-webinar-practical-solutions-for-sports-governance

In the past 5 years, 860 violent coaches were under disciplinary actions and 323 of them were reinstated or found jobs before their suspension ended



A memorable collaboration of Dior and Air Jordan

Interested in fashion and sneakers, Kim Roh Bin delivers the forthcoming Jordan Brand x Dior collection

Collaboration of Dior and Air Jordan

Dior and Kim Jones, the artistic director of Dior, partnered with Jordan Brand for the Men’s Fall 2020 Runway show in Miami to release the Air Jordan 1 High OG Dior sneaker, as well as a low cut version of the Air Jordan 1 OG Dior with a collection of ready-to-wear and accessories. The collaboration was released in order to celebrate the 35th anniversary of Jordan Brand and the debut of Dior Men’s collection in the U.S.

About the Jordan Brand

Air Jordan is a brand of basketball shoes, athletic, casual, and style clothing produced by Nike. The brand was created for Michael Jordan, former NBA player. Although Jordan sneakers are a kind of basketball

shoes, the design of the sneakers are unique and stylish, so they are used as fashion sneakers. The Jordan has many series of sneakers, but the most popular ones are the first collection, Air Jordan I. Air Jordan I sneakers are released in various color way and shapes such as high cut, mid cut and low cut, and the original(OG) models are resold in high costs. As the sneakers market is expanding, Air Jordan is earning more and more fame, collaborating with high end street brands such as Off-White or Supreme.

About Dior

Dior is a luxury brand of France, founded by the famous fashion designer, Christian Dior. Dior is under the LVMH company, with Louis Vuitton, Kenzo, Givenchy, Marc Jacobs, etc. Famous for the ‘New Look’, which was popular in the 1950s, Dior has established itself as one of the leading luxury brands.

The collaboration

The Air Jordan 1 High OG Dior sneaker and the collection were released through raffles in the cost of 3 million won. The sneaker collection balances silhouettes from the Jordan and Dior, bringing new sport styles. As Jordan Brand and Dior show the best excellence in their fields, the collaboration products are well known for their high quality and sensual design. Sneakers maniacs say that the collaboration products may be the best sneakers of 2020, and are one of the most memorable products of all time. Because the products are highly valued, they are resold in about 15 million won to 21 million won. However, despite the high costs, many sneaker maniacs and celebrities such as Jay Park, Park Seo-joon and more are buying the products.

Kim Roh Bin (1-1)



References

- Felson Sajonas, “The highly anticipated Dior x Air Jordan collaboration has finally launched,” Business Insider, 26 June. 2020, businessinsider.com/air-jordan-1-og-dior-sneakers-have-officially-launched-2020-6.
- Staff reporters, “Jordan Brand and Dior Announce New Collaboration,” Nike News, 3 Dec. 2019, news.nike.com/news/jordan-brand-x-dior-jordan-1-and-official-partnership.



Korean football players in elite European leagues

Korean footballers are making headlines on the basis of their talent and skill on a regular basis and Song Won Tae lists top 5 players describing their drastic development in Europe

Korea has a high position in the Europe Soccer Leagues. Lots of famous Korean players have engraved their names in the history of the big and famous Europe Soccer Leagues. Among those lots of players, there are Korean players who won trophies in the Europe Leagues.

Cha Bum-keun

First of all, there is Cha Bum-keun. Cha Bum-keun is thought of as a soccer legend in Korea. He was the first person in Korea to set foot on one of the big 5 Europe Leagues. As Cha Bum-keun went through SV Darmstadt, Frankfurt, and Leverkusen, he was able to hold three major trophies including two UEFA Cup trophies. Because of his marvelous efforts in the German Soccer League, Cha Bum-keun is thought of as a legend of his past teams in Germany. After finishing his life as a player, he worked as a manager for lots of clubs including the Korean Soccer team. Even though it's been a long time since Cha Bum-keun played in Germany, lots of people still remember his amazing efforts and he is said to be the best soccer player of the Korean soccer history.

Park Ji-sung

There's also Park Ji-sung who held lots of trophies in the Europe League. Park Ji-sung is loved by fans not only in Korea but all around the world. He played in Manchester United for 7 seasons. If a player stays in one team for a long time, he becomes a legend of that team. Park Ji-sung is thought of as a legend of Manchester United by lots of fans all around the world. The Korean Legend of Manchester United and his team won the Premier League four times, the EFL Cup three times, won four Community Shield matches, and had the marvelous honor of lifting the UEFA Champions League trophy and won the FIFA Club World Cup title one time. He played side to side with lots of legends including Wayne Rooney, Cristiano Ronaldo, Rio Ferdinand, and Nemanja Vidic. The legend of Manchester United was the legend of Korea, too. His efforts in the Korean soccer team was nothing to be ignored. He is currently the ambassador of Manchester United and is still being remembered as the legend of the team.

Lee Young-pyo

Another marvelous player who engraved his name in the Europe Leagues is Lee Young-pyo. Lee Young-pyo went through many big clubs including PSV Eindhoven, Tottenham Hotspur, and Borussia Dortmund. He was able to hold the EFL Cup trophy once when he was in Tottenham. Many Korean people think Lee Young-pyo as soccer legend. But actually his results in the big Europe Leagues were not that satisfactory. But still, Lee Young-pyo's magnificent efforts in the Korea soccer team made him one of the legends of Korea. After he retired from his career as a soccer player, he started a second career becoming a sports commentator.

Son Heung-min

The mentioned players above are all retired players. There are still lots of Korean players who show great results in the big Europe Leagues. One of them is Son Heung-min. Son Heung-min is currently playing in Tottenham Hotspur. What Son has shown while playing in his current team showed that he is still growing better and better. Unlike the disappointing performance of his team, his individual career is tremendous. He became the player with the highest Ballon d'Or ranking among Asians. His historical 80m goal won 10 awards marking a milestone in the history of the Premier League. Son is not just the best player in Korea, but he is one of the best players in the world. Just because he and his team hasn't yet held a trophy doesn't mean that he is not a good player. Son's efforts in the Korean soccer team is greatly noticeable, too. If there was no Son, Korea's soccer would have come to a dead end. Son's skills are getting better and better and many fans hope him to become the best.

Hwang Hee-Chan

Another current player playing in the big 5 Europe League is Hwang Hee-Chan. Hwang Hee-Chan is a player in RB Leipzig. He was once hated by lots of Korean soccer fans because of his terrible performances in the Korean soccer team, but as his efforts in his club team was getting better and better, many Korean and foreign fans began to root for him. Hwang Hee-Chan's bold movements, and his defensive abilities makes him a great player. He has currently moved to RB Leipzig, one of the strongest teams in the German League and is expected to show marvelous efforts in the big League.

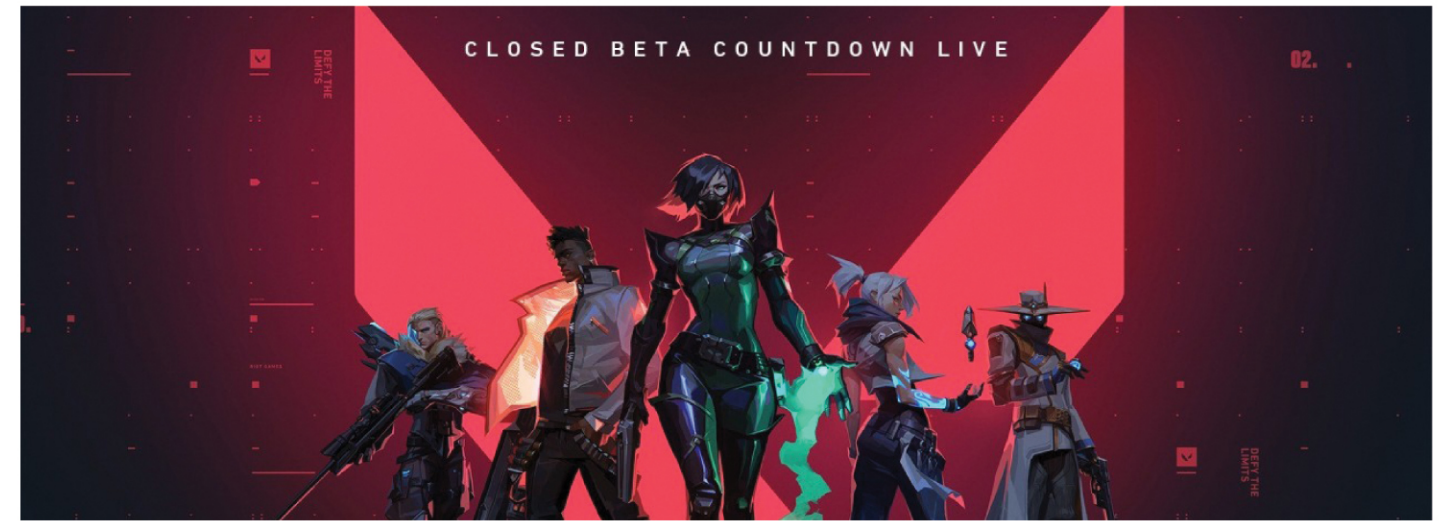
Comment

There are lots of more fantastic Korean players who showed wonderful efforts such as Park Joo-ho, Ki Sung-yong, Lee Kang-in, and Jung Woo-young. As a Korean, I am really proud of these great players and when I look at their fabulous movements, I am proud to be a Korean. We should keep encouraging the players even if they might be a little disappointing rather than criticizing them, and we should always be thankful for these players for enhancing Korea's status.

Song Won Tae (I-1)

References

- Bryan. "5 best Asian football players currently playing in Europe." Sportskeeda, 5 July, 2020. sportskeeda.com/football/5-best-asian-football-players-currently-playing-in-europe.
- Staff reporters. "Which Korean player will shine in European soccer this season?." Dong-A Ilbo, 29 July, 2011. donga.com/en/article/all/20110729/401814/1/Which-Korean-player-will-shine-in-European-soccer-this-season.



A new era of e-sports is coming with Riot Games

Developers at Riot Games are keep bringing new League of Legends experience to the users and Choi Jeong Woo summarizes the details of several major updates and changes

Riot Games is opening a new era of culture. They make various kinds of games and contribute to the boosting of game culture. Also it is having a tremendous effect on the activation of e-sports, which is attracting attention because it can be conducted in a non-face-to-face manner due to the spread of the coronavirus. Not only that, but by integrating games with the music and animation industries, it provides users with various experiences. Let's look at the games being developed and the various activities in progress by Riot Games, which is contributing to the formation of a new game culture

What kind of company is Riot Games?

Riot Games is a game company under Tencent. Marc Merrill and Brandon Beck co-founded Riot Games in 2006 and it is famous as a developer of the League of Legends.

The first step : League of Legends

Recruiting Guinsoo(famous for Guinsoo's Rageblade), one of Dota Allstars developers, they began to develop the League of Legends. It has reached 100,000 simultaneous users in just two months since its launch, and it is currently one of the most played games in the world.



A new strategy game based on the League of Legends : Teamfight Tactics

After the successful launch of League of Legends, Riot Games began to make an auto battler game, using LoL's IP. It was launched in Korea on June 10th, 2019. It was also successful with LoL, and it is also playable on mobile version.

The challenge of using a new IP: Valorant

Riot Games also made a FPS game, Valorant. It is the only released game that doesn't use LoL's IP. Although Valorant is not popular all over the world, it is gathering its own fandom in North America, where there is a lot of interest in the FPS genre.

Other games under development

Riot Games is now developing Wild Rift(a new platform version of League of Legends), LoL E-sports Manager(an e-sports simulation game), Project F(RPG), and Project L(fighting game).

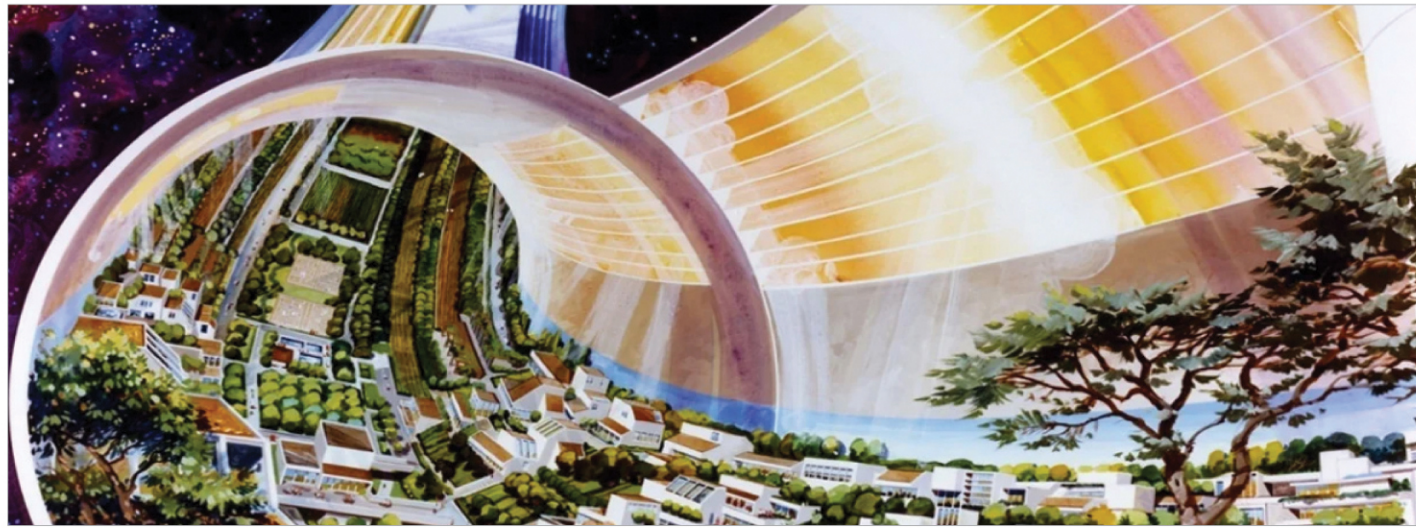
Beyond being a game company : Riot Games' endless challenges

Riot Games is also making new attempts in many ways. First, they made virtual K-POP(K/DA) and hip hop(True Damage) groups and produced many songs, which are very popular all over the world. Second, they are becoming a leader in revitalizing e-sports. They are opening the era of e-sports through League of Legends. Finally, Riot Games is promoting business to protect various cultures of the world, including games. Riot Games is not staying as a game company, but now trying to become a leader in a new culture.

Choi Jeong Woo (I-9)

References

- Brian Bosse. "The Future of League's Engine." Riot Games, 24 Sep. 2019, technology.riotgames.com/news/tuture-leagues-engine.
- Ethan Davison. "Riot is expanding its esports footprint with Teamfight Tactics. Is Valorant next?." The Washington Post, 14 Apr. 2020, washingtonpost.com/video-games/esports/2020/04/13/teamfight-tactics-esports-riot-games-valorant/.
- Kim Byung-wook. "Time to Play] Valorant, Riot Games' unoriginal but surprisingly fun FPS game." The Korea Herald, 11 May. 2020, koreaherald.com/view.php?ud=20200511000785



Architectures of the near future

Song Ji Won offers a series of some exciting recent architectural trends that are giving plenty of reasons to get excited about the future

The purpose of buildings in the past was to help humans avoid cold and heat so that they could survive in extreme conditions. However, architecture not only fulfills our needs of shelter or workspace but also represents human ideals. Through these art forms, the value and significance of architecture are being conveyed, and tremendous progress is being made in humankind. What will this ever-changing trend of architecture be like in the future?

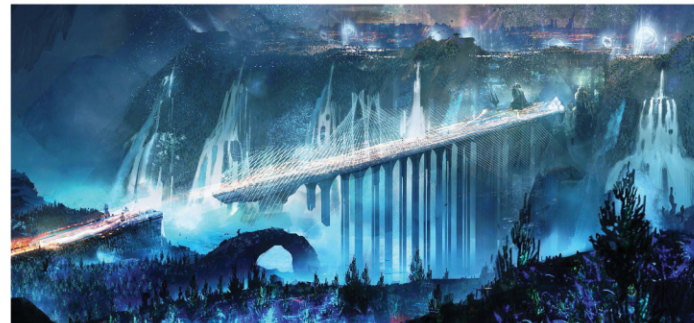
Architecture not only fulfills our needs of shelter or workspace but also represents human ideals

Underwater City

At present, we are increasingly interested in the ocean. France's J.Y.Cousteau is pushing for experiments on underwater houses where people can live and work on the seabed and has proved that they can live on the ground for one month on the seabed at a depth of 100 meters. I think that in the future, seabed bases will be gathered to become villages, villages will be gathered to form cities that are understood as new concepts will emerge. Now it is time to think about the facilities needed for human habitation. The basic elements are water, oxygen, and energy. Water needs to be equipped with seawater desalination facilities, oxygen needs to electrolyze fresh water to generate oxygen, and energy needs to be equipped with marine clean energy facilities such as tidal, wave, and wind power. Undersea housing modules where individual households reside are also needed. They should all be built on the ground and then moved to the seabed for assembly.

Space City

Interest in the universe is growing and many things about the universe are being discovered through ongoing exploration. People are saying that they want to see the universe deeper and farther, and even live in space. Former Soviet scientist Chiolkovsky proposed setting up a huge space station in space and allowing mankind to survive. So far, many advances have been made, including the creation of an international space station, and people's expectations have risen. In order to advance into a more profound universe, one must learn the architecture of outer space. There is an amazing tool that is not used much at the construction site of the earth, it's magnetic force. It is to carry out space



construction using the concept of 'liquid balance'. This is a very ground breaking concept and is likely to be applied to many difficult space engineering projects. Cool the barium copper oxide (YBCO) with a liquid gas and transform it into a superconductor. Let's find out how superconductors work in magnetic fields. If you put a magnet close to the superconductor and cool the superconductor, it's interesting. Place a plastic support on top of the superconductor, place a magnet on it, then cool the superconductor. Superconducting is complete when the temperature of the superconductor and liquid nitrogen are equal. This causes the magnet to be fixed at the same point and float in the air. This is the magnetic field. It is a space where no force can pass through and no control is allowed. Because of the powerful force, when you lift a magnet, superconductors follow. Applying this phenomenon to three-dimensional structures could also create spaceships that do not fall apart from each other by magnetic fields.

Comment

I think we can make underwater cities and space cities with our current architecture, and I think soon enough, there will be a technology for sky cities with buildings in the sky. So I hope people will be interested in architecture and join us.

Song Ji Won (1-1)

References

- Ella Ananeva, "What Will the Underwater City of the Future Look Like?," The StartUp, 15 June, 2019, medium.com/swlh/a-sneak-peek-at-ocean-colonies-9e8d4b897f5.
- Mike Colagrossi, "Urban planning in space: 3 off-world designs for future cities." BigThink, 5 Oct, 2020, bigthink.com/chemist-city/urban-planning-in-space.
- Staff writers, "Architecture." Lumen, 2019, courses.lumenlearning.com/sac-artappreciation/chapter/oe-1-27/.



Facts and information about viruses

Viruses have flourished and diversified for billions of years and Kum Jun Soo helps us deepen our understanding of what they are and what they do

Discovery of the first human virus

At the end of the 19th century, it was known that microbes caused the epidemic. These microorganisms were known to be observed by microscopes, cultured, and filtered by filters. Meanwhile, it turned out that the filter-trained substance causes the disease even after several microbes that cause the disease have been filtered. In 1892, Dmitri Ivanowski discovered that pathogens that transform the color of tobacco leaves passed through filters, and in 1908 Loeffler and Frosch obtained similar conclusions using foot-and-mouth disease viruses. In 1908 Ellerman and Bang reported that cell free filtrate could cause leukaemia in chickens after removing cells with filters, and in 1911 Rous confirmed that solid cancer could occur in chickens. In other words, they discovered that cancer can be caused by viruses.

Classification of viruses

Viruses can be classified by various criteria. For example, a virus can be classified into a rod shape, a spherical shape, or a bullet shape. Some are classified according to the host where the virus is infected, or others are classified according to the disease. For example, viruses classified as hepatitis viruses can be subdivided into types A, B, C, D, and E, which are biologically large differences. When classifying viruses, the most commonly used method is the Baltimore classification system, which is classified according to the genome, cloning, and gene expression of the virus. The Baltimore classification system categorizes viruses according to their unchanging characteristics, but the weakness is that the classifications have limited information about viruses.

Diseases caused by viruses

1. HIV(human immunodeficiency virus)-AIDS(Acquired Immune Deficiency Syndrome)
2. Influenza virus-flu(influenza)
3. Hepatitis virus-HBV,HCV
4. Human papillomavirus-cervical cancer and tumor
5. Herpesvirus-skin diseases and tumors
6. Ebolavirus-epidemic hemorrhagic fever
7. MERS virus-respiratory disease

Not all viruses are badBacteriophage

Because viruses can only survive if they are parasitic on living creatures, they destroy parasitic creatures (hosts) in the process. However, there is

a virus that parasitizes harmful bacteria in humans. It's a virus called 'Bacteriophage'. In Greek, a bacteriophage named "Eating bacteria" means "bacterial" and "eating" is a beneficial virus that attacks only germs as a host, is harmless to humans and animals, and has no particular impact on the environment. Not all viruses are detrimental to human health and in fact, as it is with Bacteriophage, some viruses have beneficial properties for their hosts.

Not all viruses are detrimental to human health, some viruses have beneficial properties for our human body

Phage therapyScientists who discovered Bacteriophage in the 1910s tried to use it to treat bacterial diseases such as plague and cholera, but the research was stopped in the 1940s when antibiotics were developed. Antibiotics, called the 20th century's greatest medical achievement, saved many lives, but in the 1990s, the uncontrolled use of antibiotics led to the emergence of super bacteria that did not die on any antibiotics. So, recently again, interest in the natural treatment therapy 'Paji therapy' using bacteriophage is growing. When treated with phage therapy, only certain bacteria can be attacked, so it is harmless to the human body and has excellent antibiotic effects.

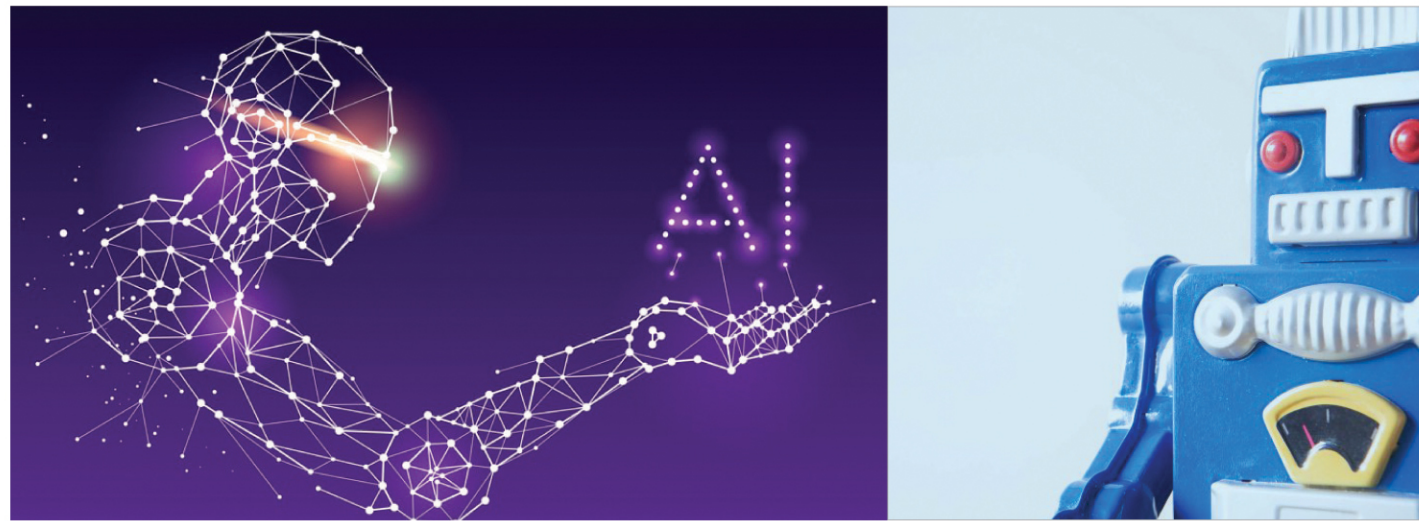
Comment

Viruses are very small and there are countless species. Viruses are prone to mutations. And viruses have countless species, making it difficult to develop vaccines. I think we should develop these areas. Viruses are mostly highly contagious, resulting in many infections in a short period of time. Therefore, we hope to develop these areas.

Kum Jun Su (1-1)

References

- Maya Wei-haas, "Viruses, explained," National Geographic, 22 Feb, 2019, nationalgeographic.com/science/health-and-human-body/human-diseases/viruses/.
- Regina Bailey, "Monoclonal antibodies: A Covid-19 treatment people might not know about." ThoughtCo, 27 Aug, 2020, thoughtco.com/bacteriophage-virus-that-infects-bacteria-373887.
- S. McCallin, J.C. Sacher, J. Zheng and B.K. Chan, "Current state of compassionate phage therapy", Viruses, 11/4 (2019), 343
- Taylor McNeil, "What Are Viruses and How Do They Work?," TuftsNow, 3 April, 2020, now.tufts.edu/articles/what-are-viruses-and-how-do-they-work.



AI in our daily lives – will it bring any benefit?

Lee Hyung Suk outlines examples of the presence of Artificial Intelligence in our current life and emphasizes the necessity to make sure human society can take full advantage of the AI systems

What is AI?

Artificial intelligence refers to a technology that realizes human learning, reasoning, perception, and understanding of natural language through computer programs. In modern times, attempts to use artificial intelligence elements in various fields of information technology is very active.

Various AI, already used all over the world

Watson, for example, is evolving into a system that uses cancer patient data and various medical data to treat cancer patients to perform cancer detection and optimal treatment. It is said that Watson performs more accurately than a famous doctor. And self-driving cars are said to be commercialized within a few years as self-driving cars without the driver operating them. Artificial intelligence will also be in charge of financial affairs. 'Chatbot' is a computer program that uses human-style conversations as part of AI technology. Chatbot, based on artificial intelligence, has evolved to be able to grasp the context and respond to questions or commands in natural language. Also, as conversations accumulate, they learn on their own and increase accuracy. It is implemented as an investment advisory artificial intelligence on behalf of people by learning specialized information such as financial transaction information and economic indicators on their own and strengthening learned knowledge on their own.

Learning methods of AI

How can such artificial intelligence learn and develop data? Machine learning is used when implementing weak AI. The terms deep learning and machine learning are being used, but machine learning is a bigger

concept. One of the methods of machine learning is deep learning. Deep learning is also the most commonly used machine learning methodology. However, deep learning does not use this prior knowledge. Once the data is put in, the machine classifies the characteristics on its own. At this time, there should not be a lot of data recklessly, and there should be a lot of so-called "correct" data that tells you what a cat photo is actually.

Various opinions on AI development

Ray Kurzweil, a world-renowned artificial intelligence researcher and director of engineering at Google, is a typical person who stresses that artificial intelligence is not a threat to mankind. Kurzweil says the alternative to eliminating the danger of artificial intelligence is to build a moral and ethical society on its own. "The best way to avoid future destructive conflicts is to continue to advance our social ideals that have reduced violence," he said. "That is ultimately how to safely manage artificial intelligence." However, there are people who oppose the development of artificial intelligence due to fear of artificial intelligence after the future of various jobs became unstable and low-cost labor increased, and AlphaGo Lee won a complete victory over Lee Sedol and evolved through deep learning. Elon Musk, famous for SpaceX, is preparing a project called Neuralink. Neuralink is a brain research startup that aims to develop a nerve race technology that implants small electrodes into the brain. He argues that nerve race technology will help humans achieve this by connecting computers and brains in order to co-exist without being dominated by the ever-developing artificial intelligence.

Lee Hyung Suk (1-11)

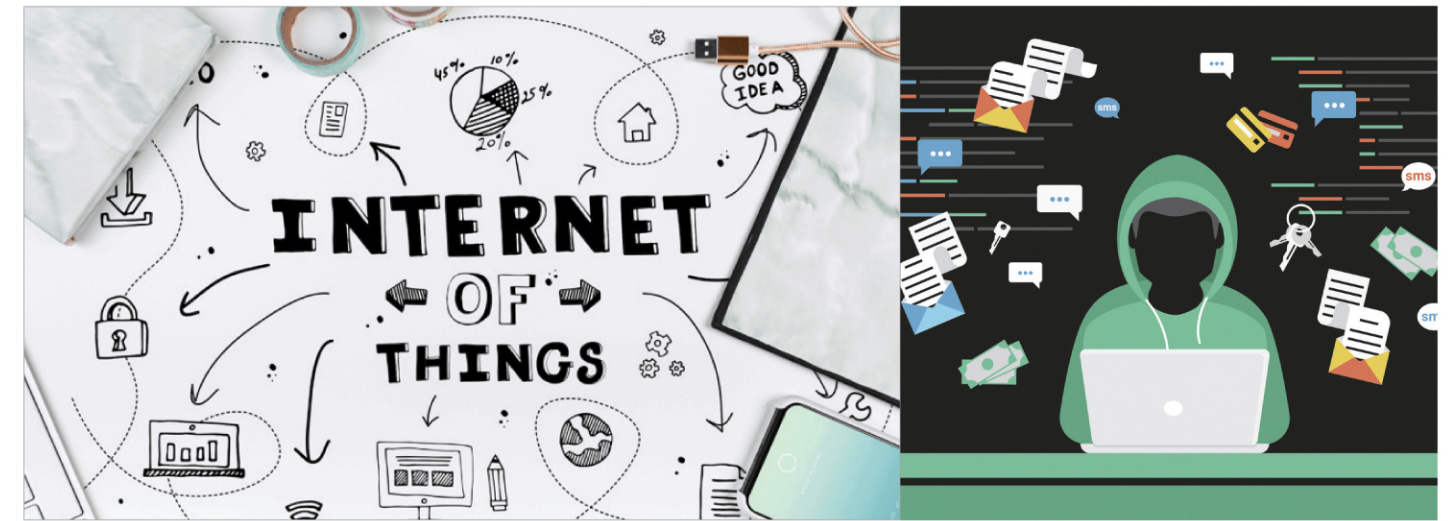
References

- Nick Heath, "What is AI? Everything you need to know about Artificial Intelligence," ZD Net, 11 Dec. 2020, zdnet.com/article/what-is-ai-everything-you-need-to-know-about-artificial-intelligence/.
- Singularity Hub Staff, "Ray Kurzweil: A Strategy for Keeping the World Safe From AI," Singularity Hub, 14 Jul. 2014, singularityhub.com/2017/07/14/ray-kurzweil-a-strategy-for-keeping-the-world-safe-from-ai/.
- S. McCallin, J.C. Sacher, J. Zheng and B.K. Chan, "Current state of compassionate phage therapy", Viruses, 11/4 (2019), 343
- Taylor McNeil, "What Are Viruses and How Do They Work?," TuftsNow, 3 April. 2020, now.tufts.edu/articles/what-are-viruses-and-how-do-they-work.

"The most important approach we can take to keep AI safe is to work on our human governance and social institutions. We are already a human-machine civilization. The best way to avoid destructive conflict in the future is to continue the advance of our social ideals, which has already greatly reduced violence."

- quoted by Ray Kurzweil,

a best-selling author and a pioneering inventor



What we can learn from cases of IoT vulnerabilities

Living in a IoT-dominated era, Choi Si Young reminds us to re-examine the threats that loom over IoT products and gives us ways to protect your devices from hackers

Nowadays IoT(Internet of Things) technology is being developed rapidly, making things possible that couldn't be done before. According to Gartner(foreign news), there will be more than 20 billion IoT devices by 2020 and as many as 75 billion connected IoT devices by 2025.

What is IoT technology?

IoT is a technology that can connect various objects to the Internet by embedding sensors and communication functions. In other words, it's a technology that connects things through wireless communication. By grafting IoT technology into everyday lives, we can now live a more effective and convenient life. For example, IoT technology can be used from simple things like smart doorlock to complex and specialized technologies like IoT blockchain and development of Railway-Based combined measurement system using IoT Technology. Thanks to it, our productivity and efficiency have increased, but one fatal problem has emerged : Hacking.

Cases of hacked IoT devices

Basically, IoT technology is like putting a small computer in an object. Therefore, if we change our way of thinking, it can be concluded that

equipments that apply IoT technology can be hacked like computers. Actually, the case of hacked IoT equipment is rapid increasing. Let's find out what kind of hacking cases have been occurred. First, there was a case that hackers hacked the CCTVs and wifi router using Mirai Botnet, which was not protected with adequate security. And there was a horrifying cases like hacked baby monitor(a device which is used to see and listen to the baby) and The spying doll Cayla(a doll made for children). But above all, Hackable medical devices and Autonomous vehicles hacking is the most hazardous problem because unlike other cases, they are directly connected with human life. Surprisingly, it actually happened at Blackhat USA 2013 by Jay Radcliffe, who demonstrated an experiment that an insulin pump implanted in a diabetic patient is hacked and the injection volume is manipulated to the lethal dose level, leading to death. And in 2016, china's security company Keen Security Lab has hacked Tesla's Self-driving car and managed to manipulate its gas pedal and brake.

Ways to prevent hacking

So, what should we do to keep ourselves safe from hackers? There are 3 simple solutions. First solution is 'Changing Password'. This is the simplest solution, but not everyone does it. By changing the password, 70% of security is done! Second solution is 'Firmware update'. Firmware is a software installed in every IT device. Manufacturer updates firmware when security problems are discovered. Therefore, updating firmware helps to protect our devices. Finally, we should use HTTPS-based IoT devices because it encrypts our communications and strengthens vulnerable security.

Choi Si Young (1-7)



References

- Anasia D'mello, "IoT security: What we can learn from recent threats," IoT Now, 1 Jan. 2020, iot-now.com/2020/01/07/100606-iot-security-can-learn-recent-threats/.
- Daniel Elizalde, "How to Protect Your IoT Product from Hackers," Daniel Elizalde, Nov. 2020, danielelizalde.com/iot-security-hacks-worst-case-scenario/.
- Max Freedman, "18 Ways to Secure Your Devices From Hackers," Business News Daily, 14 Oct. 2020, businessnewsdaily.com/11213-secure-computer-from-hackers.html.



Do electromagnetic wave blocking products really work?

If you're about to buy a little gold sticker to protect your brain cells from cell phone radiation, Shin Min Kyu advises to consider a more sensible use of your money since scientific results claim they have no effect

Misunderstandings about electromagnetic waves

You will know that electromagnetic waves come from our electronic products. Electromagnetic waves are waves generated by alternator, and electric and magnetic fields induce each other. The reason this wave is considered harmful to the body is that it is thought that when an electromagnetic wave passes through the body, the body temperature rises, which can affect the functioning of cells or organization. It is also said that it may be bad when exposed to weak electromagnetic waves for a long time, but there is no specific data



for this. Also, there are some people think that the induced current in the human body stimulates nerves or muscles.

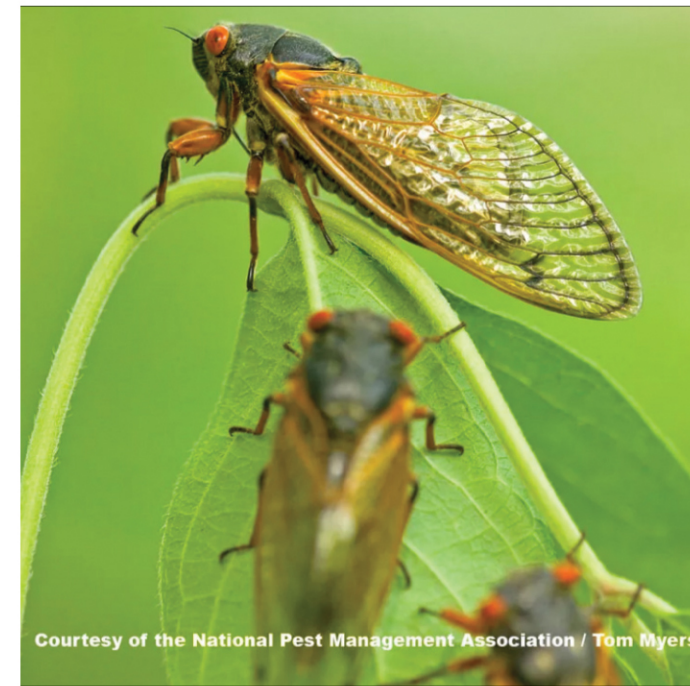
Desirable Electronic Product Usage and official data

The Federal Trade Commission reports that there is no scientific proof that these products reduce exposure to electromagnetic radiation, and warn that these products may actually increase the radiation the phones emit. A study by the Corporate EME Research Laboratory and Motorola Florida Research Laboratories tested 9 different cell phone radiation shields, 5 of which claimed to block 99% of cell phone radiation. The other 4 shields tested claimed to emit a reverse radiation that would cancel out the harmful radiation from cell phones. The study found that all of the radiation shields had no effect on the amount of radio frequency radiation a cell phone user is exposed to from their phone. However, there are some things you can do to limit your exposure to cell phone radiation. First, having fewer and shorter calls on your cell phone. Second, using hands-free devices or speaker phone mode instead of pressing the phone against your ear. Third, avoiding phone calls in places with bad reception (your cell phone emits more radiation to make up for poor signal strength).

Shin Min Kyu (2-11)

References

- Rory Cellan-Jones, "SmartDot radiation-protection phone stickers 'have no effect'." BBC, 11 Jan. 2020, [bbc.com/news/technology-55613452](https://www.bbc.com/news/technology-55613452).
- WVEC, "Do diode stickers protect you from cellphone radiation?" 13NewsNow, 18 Apr. 2018, [13newsnow.com/article/news/verify/verify-do-diode-stickers-protect-you-from-cellphone-radiation/291-541940734](https://www.13newsnow.com/article/news/verify/verify-do-diode-stickers-protect-you-from-cellphone-radiation/291-541940734).



Sounds of summer: why cicadas sing and how they make noise

Listening to cicadas chirping during day and night, Kwon Ha Jun became interested in why they are so loud and how they make that noise

Summer is back again. We can hear the familiar sound of this summer: the cicadas' song. We are used to hearing this song all the time during the summer. However, the sound that we take for granted has a lot of secrets. Today we will talk about it together.

Life cycle of cicadas

First, Let's find out about cicada's life. Cicadas are known to spend a lot of time underground and they die after a short period of activity on the ground. They come out of the eggs and dig into the ground near the trees. There they spend their childhood gnawing at the root of trees. For your information, tree roots are important because they replenish the moisture to prevent the tunnel the larvae should go in from collapsing. After growing up enough (3~17 years), they come out of the ground, shed

their skins and become adult insects. We call this process incomplete metamorphosis because they don't go through the pupa. After becoming adult insects, they also gnaw at the tree roots. At this time, male cicadas sing loudly to attract females, which is the song we hear in summer. If they succeed in breeding, they lay eggs and die.

How they make sound

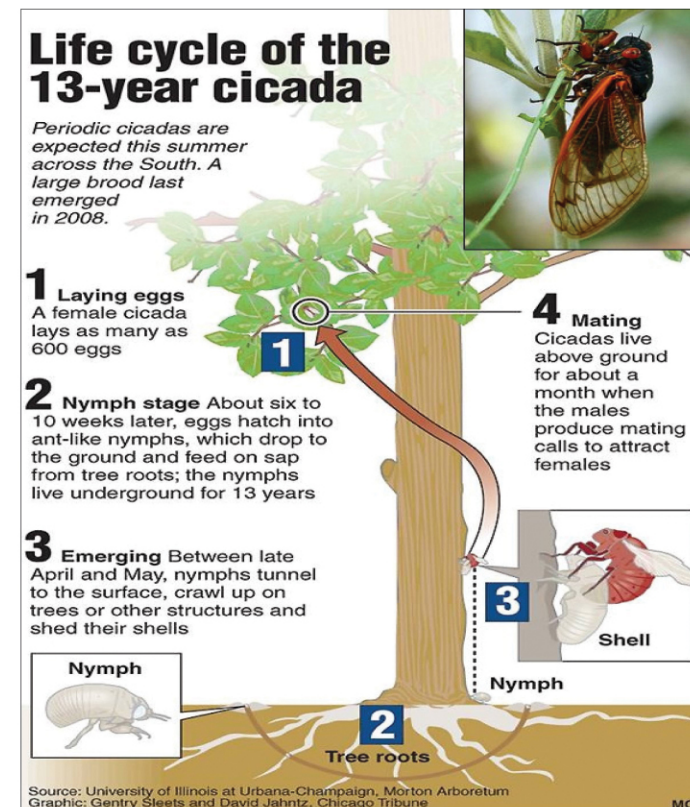
Then how can cicadas make such a loud noise with their small bodies? The answer is in the sound box they have in their stomachs. It has a similar structure to a drum. There is a thin film on their stomachs, which vibrate 300 to 400 times a second to make sounds. And the empty space in their stomach amplifies the sound by nearly 20 times. In this way, they create the sound to win female's love. Usually, the louder the cry is, the cooler the male is considered. This is maybe the reason why cicadas sing so hard. For your information, cicadas' cries are affected by temperature and light intensity. This is because it is the muscles that control their sound box. At low temperatures, muscles cannot vibrate as fast as before. So in old days, cicadas didn't cry at night. But today, the tropical nights and street lamps made cicadas cry at night to. If you are annoyed by a cicada singing loudly at night, you should think about its reason.

These cicadas spend up to seven years underground as larvae and then emerge for just one season. In other words, they only get to fly and buzz for roughly two weeks before they disappear for good... So maybe we should just let them sing all day and night

Comment

We learned about the science behind cicadas' crying. A life of a cicada is pitiful. They live underground for 3~17 years and can watch the sun for only a month before they die. We may celebrate their cries for enduring their rough and lives, not hate them just because they are noisy.

Kwon Ha Jun (1-11)



References

- Daniel Stolte, "7 Things You Didn't Know About Cicadas." University of Arizona News, Nov. 2 June, 2017, news.arizona.edu/story/7-things-you-didnt-know-about-cicadas.
- Elizabeth Palermo, "Why Do Cicadas Sing?." Live Science, 22 Apr. 2013, [livescience.com/28925-why-cicadas-sing.html](https://www.livescience.com/28925-why-cicadas-sing.html).
- Kate Penn, "How cicadas make that noise, and when it will end." York Daily Record, 25 Aug. 2016, [ydr.com/story/life/2016/08/25/how-cicadas-make-noise-and-when-end/89250508/](https://www.ydr.com/story/life/2016/08/25/how-cicadas-make-noise-and-when-end/89250508/).



Profiler

What is a profiler?

It is also called a criminal psychology analyst. It is used to investigate serial murders, which cannot be solved by general investigation techniques, to analyze the nature and behavior of suspects, and to estimate escape routes and hiding places.

What does a profiler do?

They are dispatched to the scene of the incident and reconstruct the process of the crime based on clues left at the scene to analyze the motive of the crime and the characteristics of the suspect. In addition, based on accumulated data and collected evidence, the nature and behavioral types of suspects are analyzed, and the escape route or hiding place are estimated and provided to the investigators.

They also narrow the scope of suspects to help the investigation proceed easily, or to identify witnesses and statements worthy of investigation. After the suspect is arrested, he targets his psychological weakness to induce confession, and also participates in interrogations that reveal further crimes. In addition, it is also their role to accumulate related data such as motive, location of crime, method of crime, and background of criminal growth in case of similar crimes in the future. The work intensity is very strong. You should not always relax because your working hours are long, as well as when a criminal will cause an incident. It is also not easy to detect horrible crime scenes. Therefore, mental toughness is required, of course, physically.

The history of the profiler profession

In 1956, police arrested George Metski, the so-called "mad bomber" who terrorized New Yorkers for 16 years in the United States. The case could have been solved by the psychological assumption of a psychiatrist named James A. Brussels, and then the investigation through profiling developed and profilers appeared. In 1972, the FBI established the Department of Behavioral Sciences and officially introduced profiling techniques, and in 1983, it established the National Center for Violent Crimes Analysis (NCAVC) to receive criminal data from the FBI and other national police and build a database. Investigators will write a report and ask NCAVC to profile the crime when it breaks out. The profiling investigation technique appeared in Korea in 2000 when the Seoul

Metropolitan Police Agency set up a criminal behavior analysis team in the criminal and scientific investigation departments.

How to become a profiler

The profiler is usually a police officer and works at the National Police Agency's Scientific Investigation Center, the police station's scientific investigation unit, and the National Forensic Service. Among the police officers who have a career in scientific investigation, only those who have completed specialized training in crime analysis will be eligible as profilers, and after six months of training at the police school, they will be assigned to the scientific investigation team of the local government to take charge of profiling. In some cases, he is hired as a special employee. Since 2006, about a dozen people have been selected every year, and they will also serve as profilers after six months of training at a police academy. Specialized forensic psychologists say that there are many psychology and sociology majors, and those with a master's or higher degree are the priority. Besides this, it is said that it is helpful to major in anthropology or counseling techniques.

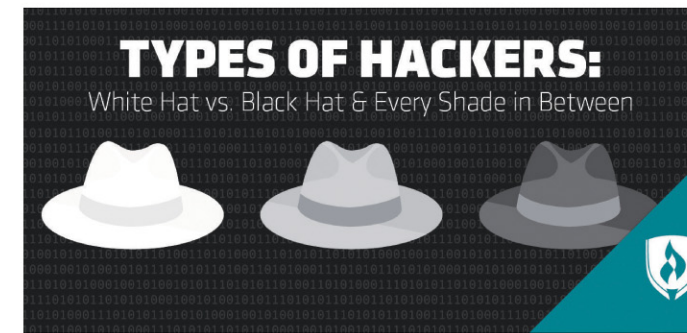
Prospects

Recently, the number of violent crimes such as "Don't Ask Murder" without a special motive for crime has soared, and the need for criminal psychology analysis is growing as more and more intelligent criminals leave no evidence at the crime scene. In addition, there are not many data accumulated in Korea because profiling is still in its early stages, and there are many violent incidents that cannot be interviewed by suspects due to lack of manpower. As expectations for profilers are high in society and the need for profilers is recognized within the National Police Agency, the size of recruitment is expected to expand in the future. However, it is said that the government is focusing on the specialization of existing personnel rather than hiring new ones. It is also said that there is a certain limit to the increase in manpower because profiling techniques are not applied to all criminal investigations.

Other information

Profilers say the intensity of labor is strong, with frequent overtime work and emergency work being prepared. It is also said that there is a lot of mental stress, such as facing horrible crime scenes and victims who have experienced them. However, it is worth a challenge for a person with a strong sense of justice and responsibility as it is worth playing an important role for society.

Kim Jeong Tae (2-2)



White hat hacker

Why do we need white hat hackers?

In the era of advanced technologies, organizations need a defensive security system. A strong line of defense will help the enterprises stay ahead of their competitors and maintain customer trust. That's when a white hat hacker comes into the picture.

What do they do?

Contrary to the popular notion, not all hackers exploit the valuable data assets of an organization. A hacker who uses hacking skills to protect organizations from threat actors is called as a "white hat hacker." They actively search for vulnerabilities in a security system so that the flaws

can be patched before a cyber criminal can take advantage of them to penetrate the system. This is usually called penetration testing. This work prevents weaknesses that are identified and then be addressed with new policies, configuration, or tools, to stop real threats before they start. And apart from vulnerability testing, white hat hackers are responsible for multiple other responsibilities. Still, their major role is to imitate the activities of a black hat to fortify the security defenses. Unlike them, black hat hackers exploit the system with malicious purpose and take money illegally.

Choi Si Young (1-7)



International Lawyer

Public's misconception about an 'International Lawyer'

When we see an international lawyer in a drama or movie, we often feel excited. The fact that there are no restrictions on the scope of activities that can be performed overseas, including in Korea, makes it cool. However, it is different from reality. The international lawyer that we commonly think of means a lawyer who is qualified as a lawyer in a particular country and is primarily in charge of international affairs. According to the Korean Foreign Advisors Act, only those who have more than three years of experience in legal affairs among those who have been qualified as foreign lawyers can obtain approval from foreign legal advisors.

What does an international lawyer do?

An international lawyer may act as a lawyer in the country where a person

has obtained a lawyer's license, or after returning from overseas activities to Korea to obtain a foreign legal advisor's license, one may work in Korea as a foreign legal advisor. They are mainly in charge of agreements, transactions, dispute settlement, contracts, litigation, corporate merger, acquisition work and so on between enterprises or countries. Basically, you should be well aware of the laws and international situation of the other countries, and speak English well for communication.

How to become one

You can obtain a lawyer's license abroad. For example, in the United States, there are often three ways. First, the common way to become a lawyer in the United States is to complete a four-year undergraduate program, enter a law school approved by the American Bar Association, obtain a three-year J.D.(Juris Doctor) and pass the bar qualification exam. At this time, the undergraduate major doesn't matter. It has a similar system to lawyers in Korea.

The second method is the process by which a law major student or a foreign lawyer at a foreign university becomes an American lawyer. Among those who have already majored in law at Korean universities or have already qualified as Korean lawyers, they have completed the Master of Law(LLM), a one-year course in the U.S. law school, and have passed the BAR Exam in some states, including New York State.

Finally, you can become an American lawyer using a professional license. In California, for example, if you own a Korean lawyer's license, you can take the U.S. attorney's exam regardless of your career. In addition, in the case of Illinois, foreign lawyers, patent attorneys, tax accountants and labor attorneys are eligible to apply for the BAR EXAM if their five-year experience of the last seven years is recognized. In addition, a four-year law degree is required, and the proof of practical experience is strictly implemented.

Prospects

As globalization progresses rapidly, the world is consolidating into one. For example, when a company goes abroad, it needs a lawyer who knows about the law system of the country where it enters. There are a considerable number of U.S. law-enforcement officials among the general major companies, law firms, and even public institutions, and the demand is on the rise.

Park Jun Seo (1-8)



Specialized accountant & auditor

Specialized accountant

First of all, I'd like to tell you about a Specialized Accounting Investigator, but in fact, a Specialized Accounting Investigator is not an official job name. The accountant working at the Public Prosecutors' Office are collectively called the Accounting Specialist. The Specialized Accounting Investigator is a public official. However, unlike ordinary prosecution investigators who took public exams, the high-tech crime investigation department of the Central Investigation Department of the Supreme Prosecutors' Office hired experienced accountants as special employment. As you can see, the accounting officer rarely transfers departments because it is a form of special employment in certain departments, but he does similar work with other general prosecutors investigators during the period when no accounting crimes are investigated.

Auditor

Next, to tell you about the auditor, the auditor works for the Financial Supervisory Service, and not only inspects and supervises financial institutions but also conducts capital market research. Even within the Financial Supervisory Service, departments are divided into various departments, such as banks, securities, and insurance, and they move around every two years to supervise and

inspect various areas so that they cannot continue to work in specific areas. It's hard to become an auditor who knows very much about a particular area, but when he's in each department, he has to understand it at an expert level, so he works with expert knowledge in many financial fields.

Difference between the two

As you can see from the two, the two jobs have many similarities, but they are technically different. The biggest difference is that first of all, a Specialized Accounting Investigator is a public official working at the Supreme Prosecutors' Office, and an auditor is an employee working at the Financial Supervisory Service. There's a difference in what you do specifically. A Specialized Accounting Investigator is an investigator who investigates crimes. However, as an auditor oversees and manages the nation's entire financial market, he does a wider job than a accounting investigator by looking at corporate audit reports every year, checking corporate accounts and calling in related people, and working in more diverse fields, including not only accounting but also bank products and insurance field.

How to become one

First of all, both jobs are one of the types of jobs that are

accountants. You have to be an accountant first in order to be both jobs. To become an accountant, you have to take an accountant exam called cpa. CPA is a certified public accountant exam and it's very difficult. In order to work as an accountant, a CPA certificate is required, so you must pass the CPA test. If you passed the CPA test and obtained a certified public accountant license, you are qualified to challenge two jobs. Supreme Prosecutors' Office sometimes post special recruitment notices for Specialized Accounting Investigators in the high-tech criminal investigation division of the Central Investigation Department of the Supreme Prosecutors' Office. If the notice is posted, apply for it, and if you pass the document screening, you have to go through the interview. It's hard to become a Specialized Accounting Investigator because they only hire a few people and don't hire many people. Actually, an auditor actually doesn't have to have a CPA license. If an auditor joins the Financial Supervisory Service, he usually becomes an auditor. However, the Financial Supervisory Service does not require a certified public accountant's certificate because it is a public corporation and employs them separately through open tests. So if you want to be an auditor, it's actually better to prepare for the Financial Supervisory Service exam than the CPA exam. However, if you look at the proportion of employment in the Financial Supervisory Service, everyone has a certificate of certified public accountant, and I think it is better to get a certificate of certified financial accountant and prepare for it first because the examination of the Financial Supervisory Service is similar to the exam of certified public accountant.

Tasks of a specialized accountant

First of all, the prosecution is divided into the Special Investigation

Department, the Public Security Department, and the Criminal Department, which deals with bribery cases or large-scale economic crimes of public officials, the Public Security Department deals with espionage cases, labor cases, and election crimes, and the Criminal Department deals with general criminal cases. In most cases, when the police conduct primary investigations and send the case to the meter, the prosecutor reviews the case, conducts a supplementary investigation if necessary, and makes a decision on the handling of the case. The Accounting Investigation Division usually works in the Advanced Crime Investigation Division of the Central Investigation Department, which integrates the existing fund tracking team, the Accounting Analysis Investigation Team, the Money Laundering Investigation Team, and the Criminal Revenue Recovery Team to operate as the Crime Revenue Recovery Center. Among them, the Accounting Analysis Investigation Team consists of corporate investigation personnel to cope effectively with various white-collar crimes such as corporate corruption. The accounting analysis team is also in charge of the Central Investigation Department of the Supreme Prosecutors' Office, but when a front-line prosecutor or a branch office requests for corporate crime-related accounting support, it is operated by going on a business trip. In the past, corporate investigations were conducted with the cooperation of related support such as the National Tax Service, but since 2004, the high-tech crime investigation division of the Central Investigation Department of the Supreme Prosecutors' Office has been in charge of corporate crime investigation support, focusing on accountants who were officially appointed as prosecutors' assistants. So a Specialized Accounting Investigator is an investigator who works with other support personnel in the support department.

Tasks of an auditor

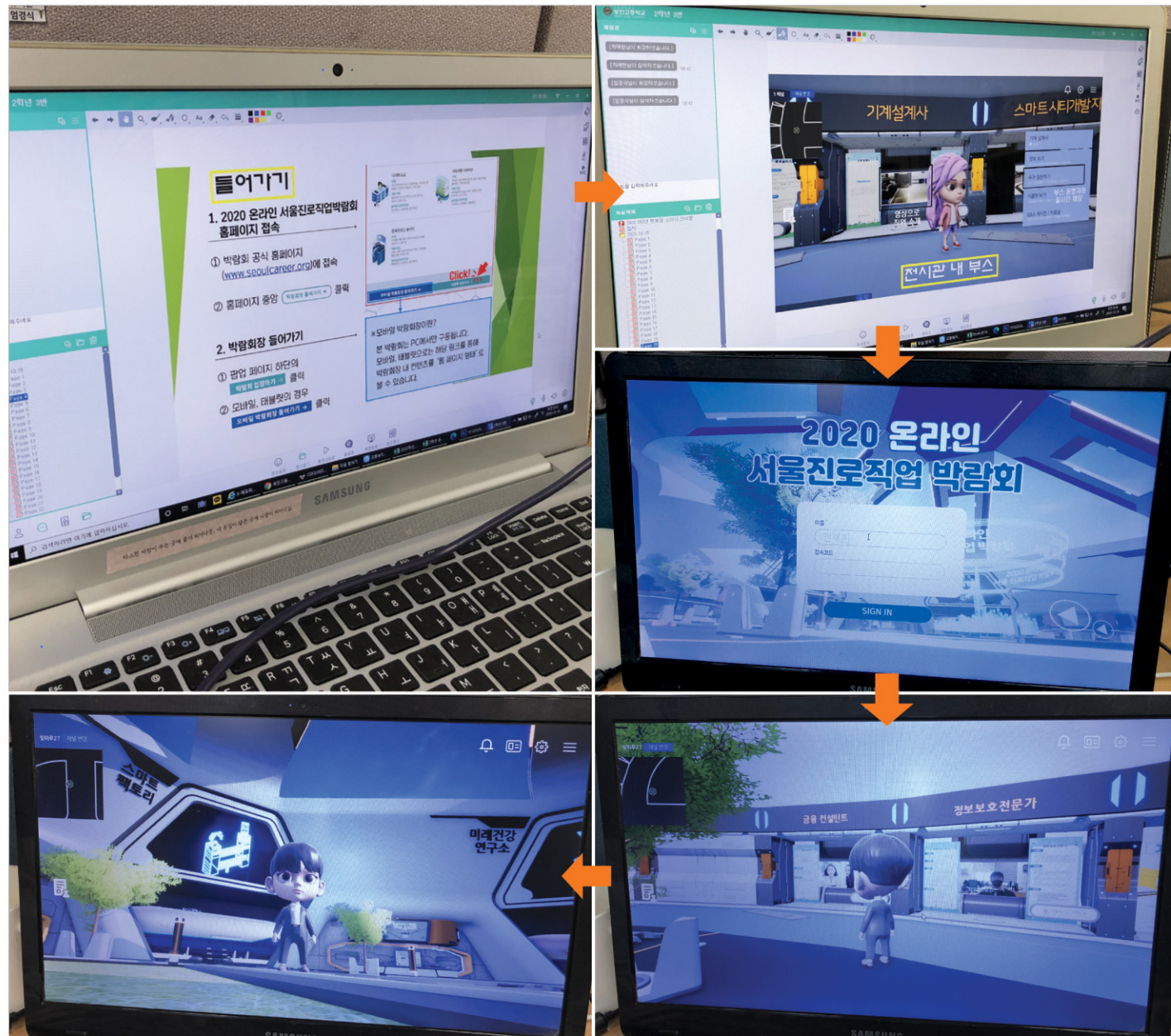
The auditor works for the Financial Supervisory Service, one of the financial public corporations, and manages and supervises all financial services in Korea. It is not possible to write down all the details of its activities in various departments, but if you write only about the Accounting Oversight Bureau, the Accounting Oversight Bureau investigates and supervises listed, unlisted companies, and accounting firms that have been externally audited by the Financial Supervisory Service (FSS), which is an unusual place where only accountants are organized within the Financial Supervisory Service. In addition, when an audit report of a listed company is submitted after the settlement of each business year, it is said that the main task is to monitor the business report and audit report to investigate the company's accounting fraud.

Future prospects

Financial markets are evolving and evolving day by day. As mentioned above, an auditor to oversee the living and breathing financial markets, and an expert investigator to serve as a guardian of economic justice in a capitalist economy, will be worth more and more, and it is a highly promising profession in the future.

Kim Jae Hyun (2-1)





Online Seoul Career Fair

On October 16, 2020, Boin High School participated in an online career fair held by the Seoul Metropolitan Government. Unlike offline fairs, students participated by simply accessing to an online server at their homes or study cafes. Students controlled avatars on the screen from a third-person perspective to learn about the academic and professional fields they were interested in virtual spaces online. The online space has been realistically recreated so that participants can feel like they are at a real fair. Each booth in the fair provided a summary of information and photos of the job, and provided users with videos that were about 5 to 10 minutes long. The composition and format of the video varied from one booth to another, but they all provided interesting content that could appeal to online participants of their profession. The producers of the booth's video were consisted of a variety of people

including scientific researchers, cyber researchers, healthcare consultants, and high school students. All though these groups differed from one another in many ways, they all shared a cause to deliver information about their jobs in their unique ways.

The biggest advantage of the fair is that students from many schools, except Boin High School, were able to explore information on their areas of interest at the fair without physical space and time constraints. Unlike offline fairs, students did not have to go to the fair themselves and could get information from each booth with a few mouse clicks in a comfortable environment. The Seoul Job Career Fair, which was held online to prevent the coronavirus, has successfully ended.

Lim Yoon Jae (2-10)



Student interview : 2020 as the year of pain, a year of hope

Jeong Hwan : Hello. Please introduce yourself.

Yoon Young Hoon : Hello, I'm Young-hoon, a sophomore at Boin High School.

J : Yes, hello, today we're going to have an interview about the spectacular year of 2020. The first question is, what do you think this year has been like?

Y : I think this year is 'a year when we all had a hard time, but everyone worked hard to overcome.' Everyone around the world has had a hard time, but we've gone through a variety of ways and processes to overcome it.

J : Oh, you're saying it was hard but everyone worked hard this year. So, what is the most memorable effort that the school has made?

Y : There were various non-face-to-face activities, but I think the most memorable thing is that the class was conducted real time using EZview. I was worried about whether normal classes could proceed this year, but I was glad that I could take good classes in real time.

J : Oh, the real-time interactive class through the program is the most memorable. There were so many difficulties and many efforts made in 2020, and I would like to ask what kind of plans and aspirations you have as a student at Boin High School for the upcoming year 2021. I think your aspirations are a little special since you're becoming a senior.

Y : Yes, I will study hard as a student at Boin High School next year. To do that, I hope that all of our students can work hard so that our daily lives can return to normal as soon as possible.

J : Yes, thank you very much for your interview.

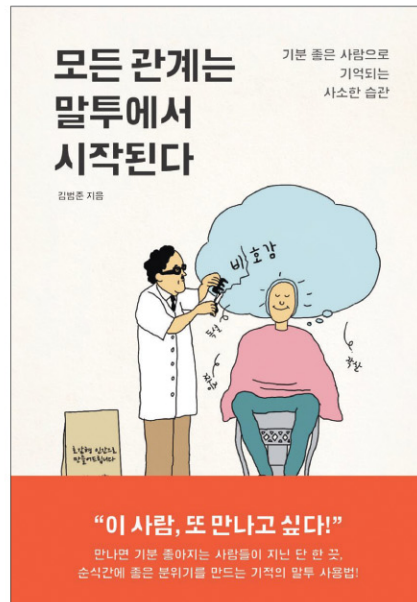
This year was a remarkably difficult year without any rhythm of normal life. Nonetheless, it was definitely a time that made us stronger and more resilient.

Comment

Through this interview with Yoon Young-hoon I was able to imagine how students will reflect on 2020 in years to come. It was a remarkably difficult year without any rhythm of normal life; students were forced to take a pause and there were no annual festivals, gatherings with friends, or normal holidays. But even so, students did not lose hope and we all should be proud with how we managed to learn from home under unusual circumstances. 2020 was not perfect but it was definitely a time that made us stronger and more resilient. We wish our lives will return back to normal as soon as possible.

Lee Jeong Hwan (2-9)

All Relationships Begin with Speech, by Kim Bum Jun



When we talk to people, we sometimes wonder how we're perceived by other person. One way to know how I'm perceived is to check my tone of speech. Speech is said to mean the habit or appearance of speaking. Here we need to concentrate on our habits. People can make a standard of judgment by guessing a person's habits or personality through habit. But you can fix it as much as you want because the way you talk is not a nature. If you don't invest your efforts in correcting your speech, you give up an important tool in living in the world.

As I said before, you can change your tone as much as you want. In order to do so, we need to know what kind of speech we should throw away. You have to give up your way of saying, "The answer is fixed, and you just have to answer." This is known as 'Dapjeongneo.' This is a tone that ignores the other person's opinion. Using this tone of speech, we cannot expect real relationship development. We should check if there have been any cases where we ignored the other person's opinion and unilaterally carried it through.

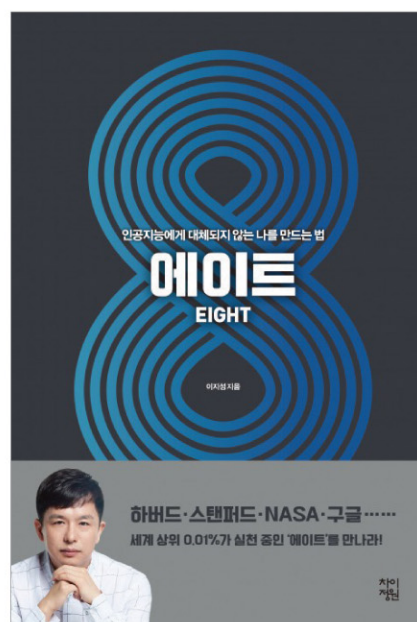
This book gives us a way to build a real relationship. I introduced one way of speaking that we should refrain from, but there are eight more cases. I hope that this book will serve as an opportunity to change yourself for better communication with others.

fosters empathy and creative imagination. In this way, it produces managers who become owners of artificial intelligence.

Finally, I took a quick look at what this book was trying to tell us. I keep mentioning it, we have to be people who can dominate artificial intelligence. This book will give you a hint about the answer or the answer to it. Although I introduced one way not to be replaced by artificial intelligence, this book introduces as many as seven more. If you have time, I recommend you read it once for the future.

reviewed by Jeong Won Young(2-12)

Eight, by Lee Ji Sung



As artificial intelligence develops, our daily lives have become more convenient. But we overlook the fact that we are dominated by artificial intelligence. According to 8, artificial intelligence supervision with deep learning technology appeared in 2012. A year later, Daniel Nadler created an artificial intelligence startup called Kensho Technology. And Goldman Sachs, the largest investment company, decided to invest in it, and the result was a huge shock. Kensho solved in just three hours and 20 minutes what 600 traders, then the highest-paid on Wall Street, had to do for a month. As a result, as many as 598 executives and employees were fired. As you can see from the book, artificial intelligence helps us, but sometimes they take jobs from us. So we should try not to be replaced by artificial intelligence.

Therefore, not to be replaced by AI, we need to control the artificial intelligence, not to be dominated by artificial intelligence. The first method of introducing in the book is to forsake your knowing and to have being and doing. Machines have intelligence, but they do not have thoughts, feelings, and minds. In the case of Harvard Business School, knowledge education, which has been pursued for 100 years, has been transformed into one that

About the school English newspaper club THE BOIN TIMES



Interested in an opportunity to enhance your English ability?
Join a club at your school for establishing a school newspaper.

- ✿ The only English-related school club
- ✿ You can write articles of ANY interest
- ✿ Voice your opinion, ideas, and ideals
- ✿ Learn the value of solid research in writing
- ✿ Build closer relationship with your friends and seniors



Woo Jong Gun(1-1)



Park Hyun Bin(1-7)



Seong Ji Ho(1-8)



photo by Park Jun Kyu(2-1)

Members of 2020 Boin High School English Newspaper Club

Date of Issue Feb. 2021

Publisher Kim Jong Hwan

Teacher-in-Charge

Noh Tae Hyun

Kim Sun Young

Student Editors-in-Chief

Kim Jae Hyun(2-1)

Lee Song Won(2-9)

Staff Reporters

Park Jun Kyu(2-1)

Kim Jeong Tae(2-2)

Kim Kang Min(2-3)

Song Woo Jin(2-3)

Choi Jun Hyuk(2-5)

Lee Jae Won(2-8)

Lee Jeong Hwan(2-9)

Lim Yoon Jae(2-10)

Shin Min Kyu(2-11)

Song Chan Min(2-12)

Jeong Won Young(2-12)

Kum Jun Su(1-1)

Kim Roh Bin(1-1)

Song Won Tae(1-1)

Song Ji Won(1-1)

Nam Seo Jin(1-6)

Choi Si Young(1-7)

Park Jun Seo(1-8)

Choi Jeong Woo(1-9)

Kwon Ha Jun(1-11)

Lee Hyung Suk(1-12)

**“ We often take for granted the very things
that most deserve our gratitude.”**

*by Cynthia Ozick,
American short story writer*



BOIN HIGH SCHOOL

School Address : 18, Ogeum-ro 49-gil,
Songpa-gu, Seoul, Korea
Tel : 02-2043-6021 **Fax** : 02-449-8063
Website : <http://boin.hs.kr>