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After watching the videos, I noticed that there are a lot of terms, specifically related to wireless networking, that I didn't know of. one of the 5G or 6G applications that I like the most is the C-V2X tech where our cars connects to other cars on the road, infrastructures, traffic lights, pedestrian's mobile phone, and even homes. In the video, it comes up with solutions that can help improve road safety, reduce traffic congestion, and enhance the overall driving experience. One of the reason why I am really interested in this topic is because as a driver myself, I've drove old style cars and even the newest model cars before. I could experience the big difference of cars throughout these few year, how car designers made the driving experience so much easier for drivers in the modern world; it feels like driver nowadays require lesser skill since their cars are equipped with a lot of sensors and connections to everything around them.

Another application that I am extremely interested in is in the video, "G Evolution &6G powered by IOWN (NTT DoCoMo)". In the video it talks about its ability to seamlessly control machines using 5G/6G technology. This reminds me of one article that I read online about how there are robots that can perform surgery while a surgeon remotely controls the robot! I think that is really cool for the healthcare industry because doctors can now perform surgeries remotely which greatly reduces time loss in emergency situations. IOWN initiative can be used in various industries, such as healthcare, transportation, and entertainment. For instance, IOWN can be used to create a smart hospital that uses advanced sensors and AI to improve patient care. This application helps the world in a way that is clear, which is why I like it.

One of the challenges is that for the current available technology, bandwidth, latency are limited. The need for a dense network of base stations and small cells to support the high-bandwidth and low-latency requirements of these applications is a problem. Next, 5G and 6G networks require new hardware components such as advanced chips, processors, and sensors. Money will always be the problem for some countries. The new technology requires a significant amount of investment from network operators, governments, and technology companies to develop and support these applications. Especially, the bandwidth auction are monopolized by few big companies, which limits innovation from outside resources.

In my opinion, the development of 5G and 6G networks is a complex process that involves the collaboration of many stakeholders, including network operators, governments, and technology companies. Even though there are several challenges, the potential benefits of these networks will outweigh the cost, and they are expected to revolutionize the way we

live, work, and communicate. In Nokia's video, it talks about how they utilize private 5G towards their factory automation. It's really cool how it is possible to set up a private network like this with a 5G speed (I am completely a beginner). The video benefits of private 5G networks and provides examples of how they can be used to improve factory operations. This allowed me to imagine how a future factory would look like, where most jobs are replaced by machines and the only people that would be used are those who control the machines.

Some questions that I am curious about is the potential cybersecurity risks associated with 5G and 6G technology. I've never learn about it, but there must be some cybersecurity risk, which I really want to know more about. Also, how we are able to solve the problem. Also, I would like to know more about the differences between 5G and 6G, is it just the speed or lower latency, a more wide range spectrum? Is it just that simple? What is the change from a lower G to a higher G. This always confuses me.

Moreover, I would want to understand how government minimize monopoly on 5G and 6G technology, since even in auctions, big companies takes over most. What are the potential economic impacts of 5G and 6G technology, and how are they different across industries and regions?