

# Preparing AI Future World: Ethics

Joowon Kim

January 23, 2018

In March 2016, there was an interesting event held that attracted public attention in Seoul, South Korea: Google Deepmind Challenge match. Google made an AI program AlphaGo and had a Go(baduk) match with Lee Sedol, professional Go player of 9 dan rank, and one of the best players in Go history. Since the game of Go is a complex board game that has lots of possibilities and requires creative strategy, that people thought it is a big challenge for AI to beat human players. Lee Sedol was also confident about the game expected to win over the AI. On March 9th, the first game of Go was on and it was streamed to all over the world. Against people's expectations, Alphago made Lee Sedol resign and won the first game. People who watched the game, and the player were shocked after the game. Nothing changed for game 2 and 3, but for the 4th game, finally he won over the AI and people said he kept people's respect. The final result of game was 4-1 for AlphaGo. As one can see, AI is doing what people never thought before. And people started to worry about the fast development of artificial intelligence. AI might take away some of their jobs, could be misused with not good intentions and so on. Among those, one thing that people are

concerned about is the danger of AI. They are finding ways to make AI ethical.

Nowadays, artificial intelligence is described as narrow AI, constructed on certain type of technology like searching Internet and autonomous vehicles. But many developers eventually want to make AI to be general AI, which would outperform humans for almost every cognitive task. When it gets to that level, there might be some problems that threat humans intentionally or unintentionally. According to the Future of Life Institute, there are two scenarios that experts think that AI might be dangerous. First is that the AI is programmed to do something devastating. For example, if AI is programmed for autonomous weapons and misused, it might cause heavy casualties. This can be a critical technology for military that might lead to an AI weapon race, eventually leading to wars. Also, to avoid hacking from others, it will be programmed extremely complexly so that people might lose control of it. Second, the AI is programmed to do something beneficial, but it develops a destructive method for achieving its goal. The autonomous vehicle AI exists to reduce the burden of people driving and they want to reduce accidents by applying lots of technology for safety. In June 2017 in South Korea, a car dealer was introducing automatic parking system on the car and asked the driver to take away his feet away from the brake and use the technology. He released the brake and the car went the wrong way and hit another car parked at the right spot. Driver asked to change the car to a new one as a compensation and the company only reimbursed 6500 dollar and told him that since technology is only an assistance device so that the car itself didn't have any defects. And the company blamed the driver.

The shortage of technology can be developed by undergoing trial and errors. And since people are putting lots of effort to develop and improve AI, the completion of AI technology is only a matter of time. But there is an important thing that people, especially AI developers or researchers need to know: Ethical problem. AI was made in order to be beneficial to humans and make their life be more convenient. As mentioned before, if the technology is misused either intentionally or unintentionally and if that will destroy our life and order, AI becomes meaningless. The first thing we need in order to be prepared for the AI world is strict education about ethical problems. Ethics is one of the most important parts of human life but also regarded carelessly. That is the reason we learn ethics our whole lives. AI ethics education also has to be done as much as traditional ethics. The society need to make strong policies and rules so that people do not overlook these issues. IBM, one of the biggest companies in the world is already providing good system of AI ethical education. They established an internal IBM Cognitive Ethics Board to discuss, advise and guide the ethical development and development of AI systems, and provides a company-wide educational curriculum on the ethical development of cognitive technologies. Of course other companies also provide education but those are mostly for developers or researchers. In order to prepare for the AI society, schools, communities and governments also need to provide systematic education curriculum so that everyone can learn and be aware of the issue. For example, make mandatory AI ethics class from the elementary school and give more weight than other academic classes. If not, AI might rule over people instead of people controlling AI.

Also, not only learning ethical education but people also need to take responsibility of the ethical issues that occur. AI technology cannot exist without humans. People make it, they have responsibility. Automatic parking technology accidents occurred in South Korea, as mentioned before, since they developed the technology and it caused the problem, they have responsibility for making incomplete technology and selling it to people. But the company shifted blame to the customer and tried not to compensate. This happened since people didn't have chance to get enough ethical education and they just try to utilize the advanced technology to make money. Technology is keep developing now and there are some malfunction and need to be complemented. So people put it to technology fault, forgetting their responsibility about using and selling the technology. To fully utilize and take advantage of the advanced technology, we need to be qualified with honesty and responsibility.

In the near future, AI technology will be closer to us in our daily life. We will be benefited by development of AI since they can do many things that people cannot, reduce the burden of labor. The most important thing to enjoy favor of AI is not to forget about ethics. The purpose of developing AI is for ourselves. Not for myself, but for everyone in the world. To adjust to an AI future, ethical education is necessary so that people do not use the technology for destroying the world and harming other people. And not only education but people need to take the ethical issue seriously on AI and need some effort to take responsibility to themselves since the ones who developed AI is us. We should remember, "people come first", not the AI.

---

## 1 Reference

1. DeepMind. (2016, March). AlphaGo Korea. Retrieved January 23, 2018, from <https://deepmind.com/research/alphago/alphago-korea/>
2. Future of Life Institute. (2015, November 13). Benefits and Risks of Artificial Intelligence. Retrieved January 23, 2018, from <https://futureoflife.org/background/benefits-risks-of-artificial-intelligence/>
3. European Parliament. (2016, October). Artificial Intelligence: Potential Benefits and Ethical Considerations. Retrieved January 23, 2018, from [http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/571380/IPOL\\_BRI28201629571380\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/571380/IPOL_BRI28201629571380_EN.pdf)
4. Lee, J. (2017, June 1). Unstable Automatic Parking System, Poor Accident Compensation . Retrieved January 23, 2018, from [https://imnews.imbc.com/replay/2017/nwtoday/article/4325980\\_21414.html](https://imnews.imbc.com/replay/2017/nwtoday/article/4325980_21414.html)