Ethical Issues in Modern Computing

There are many legal, ethical, and moral issues in computing. Since the rise of cheap and reliable computing power, many industries have been permanently disrupted and changed forever. The internet alone has revolutionized mass and personal communication in addition to commerce, among other things. Databases have allowed businesses to analyze metrics with scientific precision. This new phenomenon seems to eventually reach every industry and is a growing industry itself.

In particular, the transportation industry has made large investments in computing technologies. Self-driving or autonomous vehicles have long been a sought after goal of transportation industry giants. Uber, Tesla, and many other companies are currently competing to perfect the technology. Who will ultimately win the race to engineer a fully autonomous vehicle is a matter that is up for debate, but what cannot be debated is the continued investment and interest in the topic from major players in the industry.

Autonomous vehicles present a moral issue in the sense that they can potentially threaten the employment of millions of individuals that work in the transportation industry as drivers. So far, self-driving vehicles are in the prototype phase, however much progress has been made. It is certainly not unthinkable that software may ultimately be proven to be more safe than a human driver. Some said that a computer could never beat a human being in a game of chess, but eventually it happened. Even if autonomous vehicles do not come into being until the far future, it is important to analyze their implications in today's day and age.

In my opinion, there are powerful arguments in favor of self-driving vehicles. If the economy can absorb the unemployment created by the lack of demand for drivers, all of the human capital represented by drivers can be utilized in a more efficient way. Many will go into other industries where there is strong demand, producing goods and services and providing more value than would otherwise be the case which will expand the global economy. Many at the time said that industrialized textile manufacturing would result in mass unemployment, but the truth is much more complicated.

However, there are downsides to any technology and autonomous vehicles are no exception. For one, currently existing legal frameworks are not necessarily set up to handle the liability, insurance, and safety standards for them. If self-driving vehicles are ever to reach their full potential, beforehand, there would have to be a robust public debate about their consequences on society as a whole, given that they would have such wide-reaching implications.

In conclusion, transportation is not the first industry that computing has revolutionized and it almost certainly will not be the last. This is why it is important to analyze the legal, ethical, and moral ramifications of future computing technologies on the horizon. Of course, no one can predict the future, but with the help of experts we can anticipate potential problems brought about by technological innovation and attempt to address them. With how rapidly computing power rises, it is particularly important.