

# Class

Technology, Artificial Intelligence



Class Essay: A New Emerging Technology It's hard to imagine where the world we know today is headed when it comes to technology. A currently emerging technology is Artificial Intelligence. The concept has been around for decades. John McCarthy first coined the term 'Artificial Intelligence' in 1956. McCarthy defined Artificial Intelligence (or AI) as "the science and engineering of making intelligent machines." The more modern definition of AI is "the study and design of intelligent agents" where intelligent agent refers to a system that can recognize its environment and then takes action(s) which quantifies its possible success. Although Artificial Intelligence has been an evolving concept in the scientific community, I'm sure McCarthy had not fathomed the realm of possibilities that could derive from refining the concept. AI overlaps with robotics in which we have the autonomous car or the "driverless" car developing. Global Positioning Systems (GPS) have played a key role in these driverless cars. The GPS technology allows the car to know its relative location and what surrounds it. In 2011 Google was awarded a US patent for self-driving cars. I first discovered that they had actually succeeded in creating a driverless car when searching for a topic for this paper. I was astonished! It's been a possibility portrayed in movies and something I thought might come around in a hundred years or so. According to an article written by the New York Times Sebastian Thrun, the developer behind Google's driverless car predicted that by 2030 "more people will use self-driving cars in their daily commute than manually driven cars." The New York Times' website had an option

for readers to make suggestions to this timeline. On average readers predicted that this will happen around 2023. The date has been moved 1,794 times. This technology is only, at most, a few decades from becoming an everyday reality for our society. I thought I would discuss the possible utilizations, and impacts this technology could have on life as we know it. I think it is an interesting aspect to consider the possible differences this type of technology can make and the changes it can cause. The utilization of the technology the self-driving car is composed of is almost endless. There could be self-piloting passenger carrying planes. Motorcycles could be composed of this technology as well. Imagine if you were able to hop on a motorcycle and just tell it where you wanted to go. A person would be able to get work done in the car while driving. The driverless car would take you where you needed to go while you read your favorite book, caught up on homework, or conducted research for work. It would truly maximize our time. Beneficial effects of this technology are many. In the United States alone " motor vehicle crashes are the leading cause of death among those age 5-34. More than 2.3 million adult drivers and passengers were treated in emergency departments as the result of being injured in motor vehicle crashes in 2009. The economic impact is also notable: the lifetime costs of crash-related deaths and injuries among drivers and passengers were \$70 billion in 2005. " What if we could reverse all of these losses? If there was no longer a drinking and driving issue? We could use the recaptured finances from these unfortunate circumstances and fund matters that

are in dire constraints. Instead of paying for unnecessary medical Shipp Project 2 bills we could finance the building of a playground, buy school books for children, conduct more technology research, or focus on inspiring our future. Other perks related to the self-"driving car include time, parking and less traffic. We wouldn't have to worry about where we are going to park. The car can drop us off at the curb and go find a big lot to park in, and then come back and pick you up when you're ready to go. There would be less of a delay in commuting time during high volume traffic. The cars would be able to sense the one in front of them, this would decrease the response time needed which would decrease the distance that needs to be maintained between cars. This would in turn decrease the commute time needed because there would be a steady flow of traffic instead of the stop and go that is common during high traffic volume times. New technology doesn't develop without the potential for harmful effects. On the downside there are literally several million employed drivers. There are school bus drivers, city bus drivers, truck drivers, tow truck drivers, delivery drivers, taxi drivers, and business car drivers, among others. If there is a surplus of self-"driving cars available then this means no more driving jobs for these people, effectively displacing millions from their jobs. Road conditions would also be something worth consideration. We essentially would be required to trust this technology with our lives. This is a hard task to accept. I think that especially with the older population in our society it would be difficult for them to put trust in something they might

not entirely understand. Road conditions would proliferate this distrust. I think technology this profound begs the question, what about if it malfunctions? What kinds of tests will it be put through to make sure it will uphold to the tightest regulations and standards? There can be many benefits to this technology that has created a self-"driving car, but there can also be many harmful consequences. We must ask ourselves the hard questions and proceed with caution when we are on the brink of replacing the central mode of transportation in our lives with something new. References: 2 Shipp Project 2 (2010). Artificial Intelligence. Science Daily. Retrieved from [http://www.sciencedaily.com/articles/a/artificial\\_intelligence.htm](http://www.sciencedaily.com/articles/a/artificial_intelligence.htm) (2011, December 15). Driverless car: Google awarded US patent for technology. BBC News Technology. Retrieved from <http://www.bbc.co.uk/news/technology-16197664> Huang, J., Lin, T., Bakalar, N., Hinton, E., Kueneman, A., Allert, M., & Allen, C. (2011, December 5). Predicting the Future of Computing. The New York Time. Retrieved from <http://www.nytimes.com/interactive/2011/12/06/science/20111206--technology-timeline.html> (2011, October 4). Injury Prevention & Control: Motor Vehicle Safety. Centers for Disease Control and Prevention. Retrieved from <http://www.cdc.gov/motorvehiclesafety/> 3