Shaan Mathur

Eggert

Computer Science 35L

March 15, 2017

The Next Year of AI

Artificial Intelligence has as its definition evolved as technology has evolved; what we used to deem intelligent behavior (such as visual word recognition) no longer is called AI, making the subject a dynamic one. Colloquially, however, AI is the display of behavior that demonstrates human-like intelligence. This could involve the analysis of stimuli to make a decision about a situation, such as that of one of the more recent innovations in AI, commercial self-driving vehicles (Schank). The general idea is to develop software that can, in varying degrees of the word, think. Artificial Intelligence is a field that is beginning to burgeon in the modern world, as the demand for technology has grown wildly and consumers are more and more interested in having technology do more work for them. Staff Writer Hope Reese for TechRepublic, in the article "Artificial Intelligence: The 3 Big Trends to Watch in 2017," researched three major overarching trends that we expect to see this year in the development of AI (Reese).

The first major trend regards the growing influence of AI. This does not necessarily pertain to everyday consumer products, but can in fact be directed towards economics. Technological unemployment is becoming a more prevalent issue; as the Industrial Revolution cost many blue collar workers and private specialists their jobs, our Digital Revolution is having the same effect. In a 2013 study assessing the job vulnerability to computerization, it was found that 47% of total US employment is at risk (Frey, Osborne). As AI becomes more intelligent,

jobs that were once considered skilled find themselves becoming automated, such as taxi or car shuttle services being made obsolete as self-driving taxis become more prevalent with companies like Uber. As AI's growth continues to accelerate, the world will have to figure out how to compensate for increased unemployment, perhaps through a change in economic policy regarding unemployment benefits to allow people to remain on some sort of living wage.

Rouge AI, a topic once merely in the realm of pop culture, is another concern we face proceeding into this year. "If the training set of the AI is compromised, the hackers could introduced bias or exemptions in order to subvert the AI's predictive capabilities for their own gain" (Reese). As AI becomes more powerful and more involved in society, it begins to pose a greater danger to people. If malicious hackers were able to train the AI and introduce bias, this could have disastrous results in the real world. For instance, a self-driving vehicle who has to make the decision of saving the life of the passenger or the life of pedestrians could be hacked to make a decision in the interest of a hacker who wishes to inflict harm on either one of the parties. As the power of AI grows, so does the magnitude of its mistakes.

This paves way for the final issue of morality that comes with AI. How do we approach teaching AI what is morally right and what is morally wrong? If an AI is developed to launch missile strikes against America's enemies, what minimum percentage risk of civilian casualty would be deemed small enough to be worth the loss? Dilemmas like these require an analysis of moral philosophy, whether utilitarianism is the general moral scheme to follow or perhaps a philosophy valuing all life as equal in worth (Reese). As we do entrust more power to AI, an inevitable result of our increasing knowledge of the field, we run into ethical dilemmas that no longer keep Artificial Intelligence to the realm of STEM, but also to the philosophy of morality.

Works Cited

- Frey, Carl B., and Michael A. Osborne. *THE FUTURE OF EMPLOYMENT: HOW SUSCEPTIBLE*ARE JOBS TO COMPUTERISATION? (n.d.): n. pag. 17 Sept. 2013. Web.
- Reese, Hope. "Artificial Intelligence: The 3 Big Trends to Watch in 2017." *TechRepublic*. N.p., 20 Dec. 2016. Web.

Schank, Roger C. (1991). "Where's the AI". AI magazine. Vol. 12 no. 4. p. 38.