Prof. LeFrancois Due Date: 6/1/2020

## Informative Essay

Between 2004 and 2009 almost 40,000 mass layoffs occurred in the US, affecting over 7 million workers. (Sucher et al.) Technology is advancing at a rapid rate, with advancements in Artificial Intelligence (AI) and robotics, your job could soon be automated. This paper will cover the ethical implications of replacing large amounts of workers with robotic systems. There are many issues with replacing workers with machines. What are the economic impacts of laying off hundreds of workers. Should employers be allowed to replace capable workers with machines? What should be done with the workers who have been replaced? I used to be an intern for a factory that assembled lithium-ion battery packs for medical and military level equipment. Every year that I was interning there there was another machine that was faster and could do more than the last year. While i was at the factory, they were in the process of expanding their operation so they did not need to lay anybody off, but I got to witness firsthand how automation has changed the manufacturing process.

Automation of a job is not the same as the automation of a task Bessen states in his paper that a group of researchers evaluated 70 occupations and deemed 37 of them "fully automatable," and predicted that in the future, half of all jobs are susceptible to complete automation. However, none of the 37 jobs listed have been completely automated so far. (Bessen)

Automating jobs could be a good thing for the workers, people in the welding profession can develop eye, nose and throat irritation as well as pulmonary infections, heart disease, and lung and throat cancer as a product of working with hazardous materials. (Pham et al.) Replacing these workers with a machine would not only increase production for the company, it will reduce health issues caused by welding.

## Works Cited

Bessen, James E. "How computer automation affects occupations: Technology, jobs, and skills". Boston Univ. school of law, law and economics research paper 15-49 (2016). Print.

Pham, Q-C, et al. "The impact of Robotics and Automation on Working Conditions and Employment [Ethical, Legal, and Societal Issues]". *IEEE Robotics & Automation Magazine* 25.2 (2018): 126–128. Print.

Sucher, Sandra j, et al. "Layoffs: Effects on Key Stakeholders" (2010). Print.