Killer Apps and Killer Robots

An Ethical Framework for Answering Questions of Automation

Peter McKay, Nisansa De Silva, Elizabeth Fuller, Bradley Green, Gautam Sondur Information and Computer science Department University of Oregon

CIS 590 - Winter 2016

Abstract—In the following paper, we carry out an examination of two related ethical quandaries concerning the increasing degree [1] of automation in the modern world. First, we consider the ethics of existing systems, exploring the case in which automated systems make choices apparently on their own, and what kind of moral reasoning we face in such situations. We consider the idea that systems may act as moral agents, or as proxy agents [2] for the humans involved in their design and deployment. Secondly, we examine a somewhat more fundamental issue: is it right to automate these tasks in the first place? Rather than trying to achieve answers both general and correct, we will instead lay out a framework which may be put to use in the pursuit of answerss for specific questions.

I. Introduction

II. BACKGROUND

OUTLINE

Talk about how social issues are intimately connected to automation and industry. That is, we cannot disconnect any innovation from the changes it drives in society, and we seek to give examples of that sort of thing.

compare industrial revolution to automation and such

Talk about how economics, and the concept of the economy of scale, demands ever-increasing levels of efficiency and innovation

(probably connect that to primitive accumulation to connect to the next bit)

Related to that, talk about the need for a concentration of capital. Specifically, discuss how Japan, the Soviet Union, China, and the West achieved it differently, and the costs related to each of those situations.

Talk about the legacy of those approaches, and

how they inform our current economic status and sociopolitical climate. Name the winners and losers, and mention that we're going to keep an eye on history when we get to the point of identifying stakeholders.

Probably mention Elizaeth's point, in that there are many current groups who see the path we're on as reflective of certain different parts of history. That is, they each take particular lessons from that history, and the lesson they consider to be most important tells us something about their approach.

III. THE CURRENT SCENARIO

IV. A REVIEW OF PRESENT SOLUTIONS

- A. The Hope of the Singularity
- B. Bill Joy
- C. Jason Lanier
- D. The Amish
- E. Deep Green Resistance

V. A COHERENT ETHICAL FRAMEWORK

- A. Identifying Stakeholders
- B. General Classes of Stakeholders
- C. Defining a Coherent Value System
- D. Synthesis

VI. SELF-DRIVING CARS: AN APPLICATION OF OUR FRAMEWORK

VII. CONCLUSION

REFERENCES

[1] Carl Benedikt Frey and Michael A Osborne, "The future of employment: how susceptible are jobs to computerisation,"

1

- September 2013.
 [2] Deborah G Johnson and Thomas M Powers, "Computers as surrogate agents," *Information technology and moral philosophy*, pp. 251–269, 2008.