

Abstract

The capabilities of Artificial Intelligence are growing quickly while the technology widely proliferates. Many risks and benefits are emerging as it becomes more powerful. This thesis aims to identify the set of risks and benefits emerging from AI that affect Human Security and the implications of how they are being acknowledged and addressed in government strategies. A definition of Human Security was chosen after a review of the literature. Due to its individual country agnosticism and useful split into 7 dimensions (Economic, Food, Health, Environmental, Personal, Community, and Political Security) the 1994 UN Human Development report's definition was chosen.

Inductive document analysis was performed using the 7 dimensions of Human Security as an analytical framework. Twenty-four documents from 18 different governments were identified, and then keyword analysis was implemented on each to highlight their relevancy to each of the 7 dimensions. This allowed for the creation of a binary set of data showing the coverage of those 7 dimensions in each document and the overall coverage of each dimension across all documents. The relevancies that were identified were then qualitatively and quantitatively analysed by addressing the trends seen across the documents and each document's relevancy to the 7 dimensions of Human Security. This provides a picture of how the threats and opportunities of AI are being acknowledged and addressed by governments, shedding light on the unique insights of each document and trends across governments.

The use of the 7 dimensions of Human Security as an analytical framework has potential for analysis of other controversial topics. This research also shows the development of both traditional and emerging security dilemmas. The traditional dilemma is tied to the potential of a lethal autonomous weaponry arms race spiralling out of control. The emerging dilemma requires a shift in mind-set – the 7 dimensions of Human Security can be at odds with one another; the securing of one dimension may cause insecurity in another, creating tension between them. Politicians and technologists with an interest in the creation of beneficial AI may find this data and analysis useful because of its in-depth breakdown of AI trends in government strategies relative to Human Security risks and benefits. AI must be built with fairness, accountability, and transparency in mind to ensure it avoids disparate impacts and benefits everyone equitably.