A Confucian Algorithm for Autonomous Vehicles

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Abstract

Any moral algorithm for autonomous vehicles must provide a practical solution to moral problems of the trolley type, in which all possible courses of action will result in damage, injury, or death. This article discusses a hitherto neglected variety of this type of problem, based on a recent psychological study whose results are reported here. It argues that the most adequate solution to this problem will be achieved by a moral algorithm that is based on Confucian ethics. In addition to this philosophical and psychological discussion, the article outlines the mathematics, engineering, and legal implementation of a possible Confucian algorithm. The proposed Confucian algorithm is based on the idea of making it possible to set an autonomous vehicle to allow an increased level of protection for selected people. It is shown that the proposed algorithm can be implemented alongside other moral algorithms, using either the framework of personal ethics settings or that of mandatory ethics settings.

Keywords

Autonomous Vehicles, Moral Algorithm, Trolley Problem, Confucianism, Familial Love