

Criminal Justice and Artificial Intelligence: What is the input problem?

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Artificial intelligence is increasingly permeating many types of high-stake societal decision-making such as the work at the criminal courts. Various types of algorithmic tools have already been introduced into sentencing and this development is likely to increase in the coming years. However, it is also generally recognized that idea of supplementing, or supplanting, human judges at sentencing gives rise to a plethora of ethical challenges. One such challenge that has highlighted by several theorists has become known as the “input problem”. According to this problem, the sentencing process often involves considerations of subtle and interacting factors that cannot in an adequate way be inputted into a sentencing algorithm. However, without a proper input, a sentencing algorithm cannot be expected to deliver a reliable sentencing recommendation. The purpose of this presentation is to present a thorough analysis of the nature of this problem. First, it is argued that the input problem consists of several separable challenges that have not been appropriately distinguished in the current debate. Second, it is argued that the nature of the input problem has often been misunderstood in the ethical discussions. For instance, it is shown that the input problem is contingent on penal ethical considerations and that the problem, therefore, is much more complex than have yet been realized. Finally, it is considered how the different interpretations of the input problem might be handled in criminal justice systems in which algorithmic sentencing tools are implemented.