

Computing Machinery and Legal Intelligence: Towards a Reflexive Model for Computer Automated Decision Support in Public Administration

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Abstract : In this paper, we propose a model for human-AI interaction in public administration that involves legal decision-making. Inspired by Alan Turing's test for machine intelligence, we propose a way of institutionalizing a continuous working relationship between man and machine that aims at ensuring both good legal quality and higher efficiency in decision-making processes in public administration. We also suggest that our model enhances the legitimacy of using AI in public legal decision-making. We suggest that case loads in public administration could be divided between a manual and an automated decision track. The automated decision track will be an algorithmic recommender system trained on former cases. To avoid unwanted feedback loops and biases, part of the case load will be dealt with by both a human case worker and the automated recommender system. In those cases an experienced human case worker will have the role of an evaluator, choosing between the two decisions. This model will ensure that the algorithmic recommender system is not compromising the quality of the legal decision making in the institution. It also enhances the legitimacy of using algorithmic decision support because it provides justification for its use by being seen as superior to human decisions when the algorithmic recommendations are preferred by experienced case workers. The paper outlines in some detail the process through which such a model could be implemented. It also addresses the important issue that legal decision making is subject to legislative and judicial changes and that legal interpretation is context sensitive. Both of these issues requires continuous supervision and adjustments to algorithmic recommender systems when used for legal decision making purposes.

Keywords : administrative law, algorithmic decision-making, decision support, public law

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