

'Explainable Artificial Intelligence' and Reasons for Judicial Decisions: Why Justifications and Not Just Explanations May Be Required

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Abstract : Artificial intelligence (AI) solutions deployed within the justice system face the critical task of providing acceptable explanations for decisions or actions. These explanations must satisfy the joint criteria of public and professional accountability, taking into account the perspectives and requirements of multiple stakeholders, including judges, lawyers, parties, witnesses, and the general public. This research project analyzes and integrates two existing literatures on explanations in order to propose guidelines for explainable AI in the justice system. Specifically, we review three bodies of literature: (i) explanations of the purpose and function of 'explainable AI'; (ii) the relevant case law, judicial commentary and legal literature focused on the form and function of reasons for judicial decisions; and (iii) the literature focused on the psychological and sociological functions of these reasons for judicial decisions from the perspective of the public. Our research suggests that while judicial 'reasons' (arguably accurate descriptions of the decision-making process and factors) do serve similar explanatory functions as those identified in the literature on 'explainable AI', they also serve an important 'justification' function (post hoc constructions that justify the decision that was reached). Further, members of the public are also looking for both justification and explanation in reasons for judicial decisions, and that the absence of either feature is likely to contribute to diminished public confidence in the legal system. Therefore, artificially automated judicial decision-making systems that simply attempt to document the process of decision-making are unlikely in many cases to be useful to and accepted within the justice system. Instead, these systems should focus on the post-hoc articulation of principles and precedents that support the decision or action, especially in cases where legal subjects' fundamental rights and liberties are at stake.

Keywords : explainable AI, judicial reasons, public accountability, explanation, justification

Conference Title : ICAILKM 2019 : International Conference on Artificial Intelligence in Legal Knowledge Management

Conference Location : Sydney, Australia

Conference Dates : December 02-03, 2019