A characterization of approval ranking

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Abstract

Fishburn and Brams (1978) introduce *approval voting*, which is the voting rule selecting candidates who get the most approvals from voters. In this paper, we consider *approval ranking*, which is the extension of approval voting to a social preference function. Assuming that each voter has a dichotomous preference, we then show that approval ranking produces the most decisive binary relation among social preference functions satisfying completeness, neutrality, anonymity, and non-manipulability. In addition, we offer two characterizations of approval ranking; the first one is that approval ranking is the unique social preference function satisfying completeness, neutrality, anonymity, nonmanipulability, and tie-breakability, and the second one is that approval ranking is the unique social preference function satisfying completeness, neutrality, strict symmetry, and efficiency.

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