

世界前百大的大學排名分析

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摘要

Since 1983, "U.S. News and World Report, published the first university ranking, the university competition are formally initiated. Relevant publications followed to appear in countries of the world. However, these university rankings could not provide causal relationship between ranking and evaluation criteria. Thus students and universities could not have sufficient information for proper decision and actions. This study focuses on resolving the insufficient information. It adopts the dominance-based rough set approach (DRSA) to induce the dominance criteria for the top hundred universities based on the Academic Ranking of World Universities. DRSA is a technology of multi criteria decision analysis, which explores the criteria dominance relationship by pair comparisons. The rules for the top hundred universities finally are presented with 'if ..., then...' . They could help users to realize the inside of university ranking.

In the results, the most important criterion for the top hundred universities is the fundamental science that can enhance human happiness such as the Nobel Prize (Nobel Laureates) and the Fields Medal. The highly cited papers position is placed at the second.

關鍵字：university rankingm, dominance-based rough set approach (DRSA)