

TOPOLOGICAL STRUCTURING WEB MILESTONES BASED ON ARC RANKING METHODS

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ABSTRACT. *The quality of manual Web surfing may be enhanced by giving a milestone. We introduce an arborescence ranking measure that fuses textual relevancy of the connected Web objects to compute the relevance score of the hyperlink connecting them. To measure the degree of relevance among these Web objects, we computed the arc weights of the corresponding hyperlinks and show the robustness of the algorithm. With real data sets in the experimental procedure, our method showed the effectiveness of the algorithm. Our arborescence ranking measure to build the Web structure as a milestone can be a significant enabler for the improvement of the new Web search mechanism.*

Keywords: Web search, Arc ranking, Arborescence algorithm

1. Introduction. It is common for Web users to start Web search with a Web page returned by the search engine from which the users can surf to other linked objects mostly within a website. The quality of manual Web surfing may be enhanced to go through for a prior Map or a milestone. The milestone of the Web site may provide benefits for the users such as allowing topological context, reducing disorientation, providing a sense of the extent of a particular Web site without getting any details and guiding as a visual surrogate for the users [17]. In this paper, we suggest an automatic surfing milestone, called a Web structure, so that the user can be guided or at least the number of user clicks can be minimized.