World Academy of Science, Engineering and Technology International Journal of Computer and Information Engineering Vol:11, No:10, 2017

Analyzing Keyword Networks for the Identification of Correlated Research Topics

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Abstract : The production and publication of scientific works have increased significantly in the last years, being the Internet the main factor of access and distribution of these works. Faced with this, there is a growing interest in understanding how scientific research has evolved, in order to explore this knowledge to encourage research groups to become more productive. Therefore, the objective of this work is to explore repositories containing data from scientific publications and to characterize keyword networks of these publications, in order to identify the most relevant keywords, and to highlight those that have the greatest impact on the network. To do this, each article in the study repository has its keywords extracted and in this way the network is characterized, after which several metrics for social network analysis are applied for the identification of the highlighted keywords.

Keywords: bibliometrics, data analysis, extraction and data integration, scientometrics

Conference Title: ICCSIB 2017: International Conference on Cybermetrics, Scientometrics, Informetrics and Bibliometrics

Conference Location: Barcelona, Spain Conference Dates: October 30-31, 2017