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Pulau Pinang



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Matching Technique for Resource Discovery using PageRank

QASEM M. ZARANDAH

Full-Time

Supervisor's Name
Dr. Fazilah Haron

Examiner's Name
Dr. Zurinahni Zainol

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Universiti Sains Malaysia
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By

QASEM M. ZARANDAH

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Declaration Page

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Abstract

Nowadays, anybody can search and get the information which he/she needs by using the internet, World Wide Web (WWW) which consists of a lot software programs called (Search Engine). These programs such as (Yahoo, Google, Msn...etc) help users in finding his/her information. The main idea on most of Search Engines is to survey the web sites, analyze and build their databases. It also works as a check to the input (user keyword) on his/her databases, and then finds the best sites and ranking it. Finally it returns the ranking sites to the user. With several Search Engines, each one of the following has special techniques to implement its idea. For example, Google Search Engine uses PageRank technique to rank its results, and so far this technique differentiates Google as the best Search Engine. This work supposes to implement PageRank technique into Grid Computing environment, where in this environment there are a lot of resources, users with jobs want to achieve their jobs, and schedules which match between resources and users job. In this work, we will apply PageRank inside PBS scheduler to match users with resources, where PageRank technique works on regard of both the state of users and resources.

Keywords: search engine, PageRank, grid computing, Scheduler.