## School of Computer Science Universiti Sains Malaysia Pulau Pinang





## Final Report CCS500 M.Sc. COMPUTER SCIENCE PROJECT

Matching Technique for Resource Discovery using PageRank

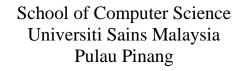
QASEM M. ZARANDAH

Full-Time

Supervisor's Name Dr. Fazilah Haron

Examiner's Name Dr. Zurinahni Zainol

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By

QASEM M. ZARANDAH

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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.