Expert Explorer System (EES)

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Abstract: In this paper, we are proposing a system which would help the scholars and researchers to find an expert or a specialist in their interested field so that experts can contribute to their oeuvre or assist them. Furthermore they can get references and a guide from Expert’s ongoing or existing projects. An archive of the expert’s profile is created and maintained to find professionals and experts who are molding along the similar subject as scholars. The technology and various perceptions used to develop the system have been discussed. This search engine works on android as well as windows platform. User’s details are fetched from various social networking websites in which user maintains their accounts. For holding an expert profile and showing the best suitable result, user’s interest and work domain have been regarded as a prime prospect.

Index Terms: EES, Information Capturing.

I. INTRODUCTION TO EXPERT EXPLORER SYSTEM

Expert explorer system (EES) aims at searching the professionals and experts in a specific field worldwide or from some particular region. Through this system a searcher or an organization can discover and reach the masters. They can claim expertise, assistance and guidance by approaching them or using community built by the system. It is an effective educational and staffing tool which helps in exploring the intellectual human resource. It connects various researchers around the globe in a network and increases the knowledge about the work done and being carried out by the others. Data sharing will become more easygoing and will cut the work load as searchers can get the needed data. The information is fetched from different social networking sites and web logs such as Linked IN, Blogger, Facebook, and Twitter that delivers the outcome in the form of profiles of the most efficient professionals.

II. EXISTING SYSTEM

A people finder system is used to find experts at the NASA organization which automatically finds out the experts in the particular field in an organization. It is used to analyze the human resource in an organization and make the plan for dealing with future needs. It helps to do staffing and managing intellectual capital\cite{1}. There are certain websites exists which applies the answers to the user in unorganized, uncategorized, irrelevant, limited and in scattered form.

III. PROPOSED SYSTEM

Currently there is no such system that provides an environment where people can search for their research domain specialists who are working on the related subject. The researchers and the developers need to find the experts so that they can learn about the different ongoing projects and the research performed by other experts. They may make a community for a particular project to get each other’s assistance. This system collects, analyzes and processes the data that is captured from various sources like social media, mobiles, comments, blogs, emails etc. The proliferation of this system is to manage complex data from the various sources. This system intelligently organizes the information architecture from the data volumes or the poor quality data garnered from the user.

IV. PROPOSED SYSTEM ALGORITHM

This algorithm operates on certain areas that are:

A. Capturing: Gathering up the data from the user.
B. Analyzing: examining the gathered data.
C. Discovering: searching the relevant information in the acquired data.
D. Managing: organizing the information.
E. Processing: providing the best suited outcome to the user.
V. WORKING

A. Data is acquired from the user’s social media account.
   User[
   ← ['social media data']

B. The collected data is stored into the database
   Database
   ← User [ ]

C. Data is arranged and categorized according to the classification algorithm.
   - Input data is filtered using fields such as user’s interest, occupation and working projects.
   - Filtered data is stored in a tabular form.
   - Tables are linked using common user id field.

D. Input search terms are matched with database records
   For all the value of t: P (t)
   Find R←(Count [t in p])
   Where t=search item and p = person stored profile R= result set

E. Best matched data is retrieved and shown to the user.
   Output ←Max(R)

VI. FRONT END WORKING

<table>
<thead>
<tr>
<th>User ID</th>
<th>Data mining</th>
<th>Cloud Computing</th>
<th>Machine Learning</th>
<th>Neural Network</th>
<th>Artificial Intelligence</th>
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<td>4</td>
<td>18</td>
</tr>
<tr>
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VII. BACKGROUND WORKING

Collect Data from User → Store in database → Categorize data

Match with the keyword → Retrieve best matched data → Send data to Front end
VIII. IMPLEMENTATION TECHNIQUES

To develop Expert explorer system (EES), following tools are used:

- Visual Studio Ultimate 2013
- Facebook app development platform
- SQLite Database
- Searching technique

IX. DATABASE

Database contains various fields which consist of user’s interest and work domain. Each row represents a user and its likes on an individual topic. As shown in the table 1.1, highlighted cells show the experts in that specific field which consists of maximum likes rated by other registered users.

Table 1.1: Result Set

X. SEARCH RESULT

A. When the user searches for a topic ‘t’
B. Searched key ‘t’ is matched with the database fields
C. User ‘u’ who is having

<table>
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| V. | W. | X. | Y. | Z. | AA.
| BB.| CC.| DD.| EE.| FF.| GG.|
| HH.| II.| JJ.| KK.| LL.| MM.|

For example, if a seeker searches for the keyword 'Artificial Intelligence' then the user profile related to 'Artificial Intelligence' is fetched from the database. Number of likes are counted for each user on topic 'Artificial Intelligence' and
this result is sorted according to the count of likes. The users (U1 and U3) who have maximum likes are shown to the user as an experts’ profile and rest are shown into related or professional people category.

CONCLUSION AND FUTURE WORK

Expert explorer system provides online service to the people for searching experts and can produce citations and a template from their ongoing or existing projects. It encourages worldwide information and knowledge sharing. An algorithm has been successfully applied to give the favorable result to the user. Researchers’ and scholars’ requirements have been kept in mind to get a system that is uniform from the outset to the remnant and that serves the intended purpose effectively. The future aim is to expand the system and enhance the ability of the system to provide the most suitable information.

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