

Scheduling Support System for Academic Conferences Based on Interpersonal Networks

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Background

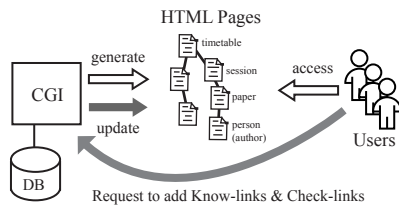
To activate discussion in academic conferences and promote communication among participants, it is important for participants to find interesting presentations and to know what kinds of people participate and which participants share similar concerns. However, it is hard for a user to learn such information from a large amount of information on presentation and participants.

Approach

We proposed the system which adopted a "person as content" strategy. It means that persons are information sources; it treats persons as information nodes that are accessible to other users. These nodes are connected through interpersonal network based on their own relationships.

System Outline

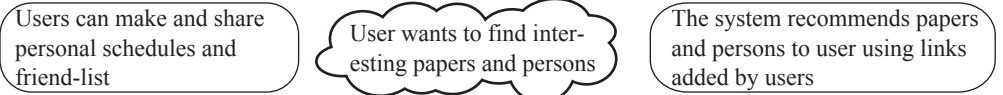
- The system dynamically generates the following four types of HTML pages.
- Each HTML page is linked mutually based on the relationship stored in the databases
- A user can browse the generated HTML pages freely and even add a new relationship.



- * Know-link: User add it to persons who she/he knows
- * Check-link: User add it to papers which she/he is interested in

Key Features

- Based on online timetable of conference
- Users can make a personal schedule and an interpersonal network
- Users can share private information with simple access control based on interpersonal networks
- The System recommends persons and papers to users using links which user added



Personal Schedule

It's a personal timetable of conf. When a user add a check-link to papers, it is updated.

sessions include checked papers

checked papers

Recommendation

The system recommends papers and persons using links which user added

recommended items

My Page (I-know List)

It's like a personal portal. There are own papers, hyper links of some services and know-links list

user's papers of this conf.

persons whom user knows or is known by

BBS

All papers have each BBS. It can be used by only members who added Check-link to the paper.

comments

recommended items

Experiments

We applied this system to the academic conference called JSAI2003 (Japaneses domestic conf. for AI)

JSAI2004

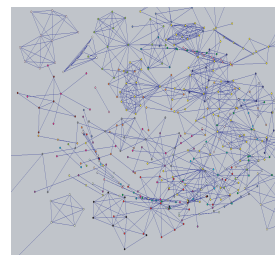
- date: 2003/5/30-6/4
- place: Niigata, JAPAN
- participants: 457
- sessions: 35
- papers: 256
- authors: 514

System

- start: 2003/4/30
- end: 2004/6/7
- users: 276
 - who added know-links: 99
 - who added check-links: 149
- added links: 2683
 - know-links: 840
 - check-links: 1843

Results of Know-link Networks

- The system was used by 276 users. 160 users of them added 1840 Check-links and 99 users of them added 840 Know-links.
- There are two types of interpersonal networks. on the system. One is coauthor networks which is generated from relations among joint authors. And the other is know-links networks.
- Know-links network has a tendency of small-world network and function as a connector for coauthor networks



Coauthor Network



Know-links Network

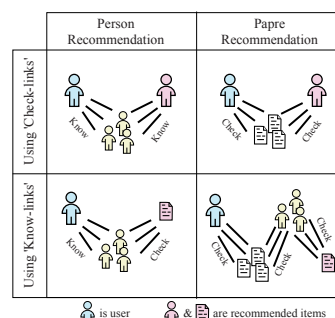
Results of Recommendation

There are 4 types of recommendation methods:

- using Know-links or Check-links
- recommend Papers or Persons to users

The result shows that:

- Using check-links: find items which many people are interested in
- Using know-links: can find items which a small community that including user and her/his friends are interested in locally



4 types of recommendation methods

