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.

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

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

JSAI2004
- date: 2003/5/30-6/4
- place: Niigata, JAPAN
- participants: 457
- sessions: 35
- papers: 256
- authors: 514

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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 kinds 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

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