

Conference Community Implement for Conference Navigator 3 Report

INFSCI 2950 Independent Study: System

2014 Fall & 2015 Spring

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Introduction

This report is about all the works related to conference community CN3 we did during 2014 fall and 2015 spring. Our group members include Jinyuan Liu, Xidao Wen and Ruonan Zhang. It contains a brief introduction of CN3 and techniques that being used through developing process. The regular routine of developing each single conference is also discussed in detail in this report. Detailed information have been listed for the pages we have modified. There pages are `communityAttendee.php`, `communityAuthor.php`, `communityConnections.php`, `communityHomePage.php`, `communityRec.php`, `communityTop.php`, `communityUser.php`. Since this project is a long-term project due to its excellent compatibility for almost every conferences that been hold in coming years, there are still a lot of jobs need to be done in future. At the bottom of this report, limitations and future works were presented.

This project is a course job in Independent Study at 2014 fall and 2015 spring semesters. Our supervisors are Dr. Peter Brusilovsky and Xidao Wen.

Conference Navigator 3 (CN3)

Conference Navigator (<http://halley.exp.sis.pitt.edu/cn3/portalindex.php>) is a personal conference scheduling tool with social linking and recommendation features. Users can control access to their information in Conference Navigator. It provides easy accesses to conferences such as UMAP, Hypertext, i-KNOW, etc. People who attend or have interest in those conferences could find themes, schedules, hold places and other relative information via Conference Navigator (Fig.1).

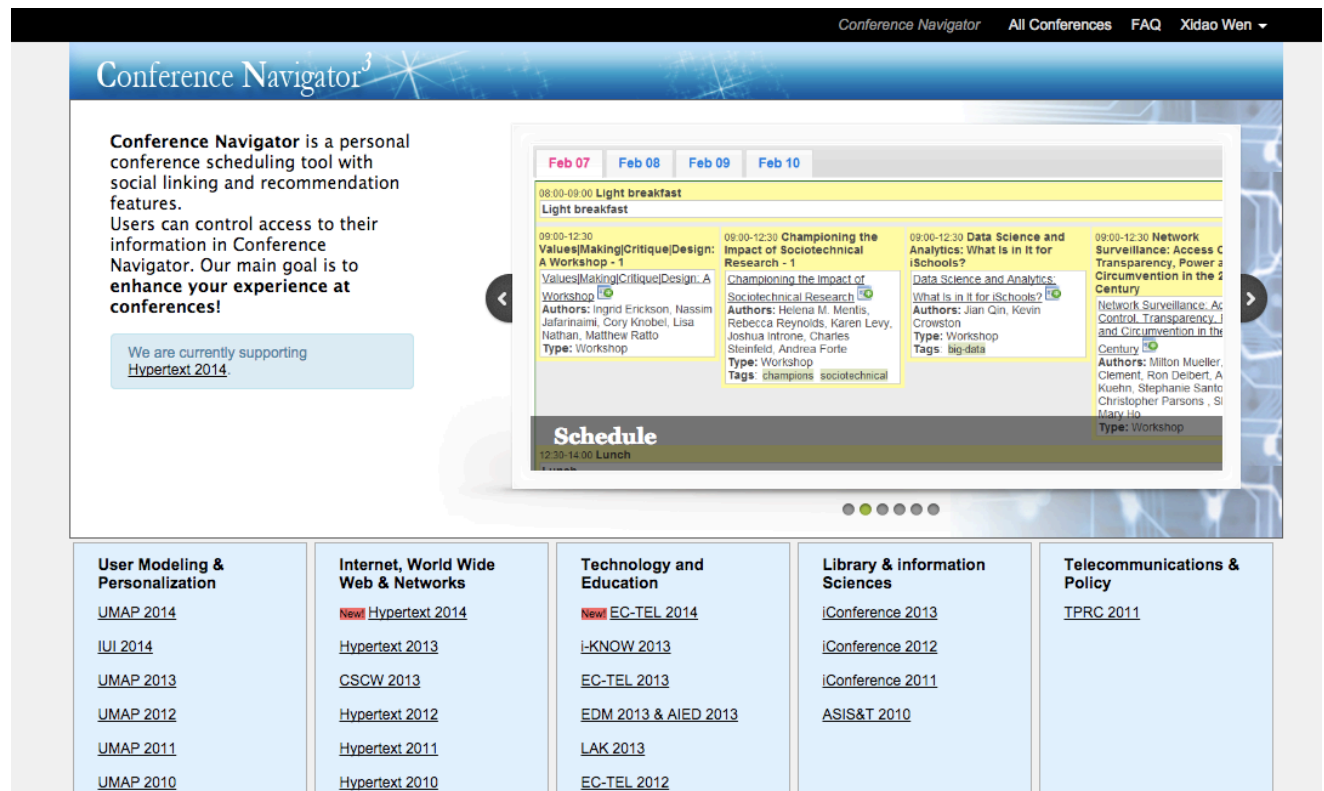


Fig.1 Main page for Conference Navigator

In order to provide users more convenient access, there is also a developed mobile version of Conference Navigator. Users can download apps named by current conference from app stores (Apple and Android versions available currently). Conference Navigator is focused on academic conferences. Thus, users can find relative papers, author information on Conference Navigator. With these useful hyperlinks, users can get well prepared on those sessions that they want to attend and study deeper on those topics.

There are five fields of conferences on Conference Navigator, below is a list of them.

- First is User Modeling & Personalization, which contains UMAP, Adaptive Hypermedia.
- Second is Internet, World Wide Web & Networks, which contains Hypertext and CSCW.
- Third is Technology and Education, which contains i-KNOW, EC-TEL, EDM & AIED and LAK.
- Forth is Library & Information Sciences, which contains iConference and ASIS&T.
- Fifth is Telecommunications & Policy, which contains TPRC (All capital letters represent names of conferences).

Background

Current CN3 version only support users to browse information according to each conference. For example, on main page, select a conference and browse the information (Fig.2).

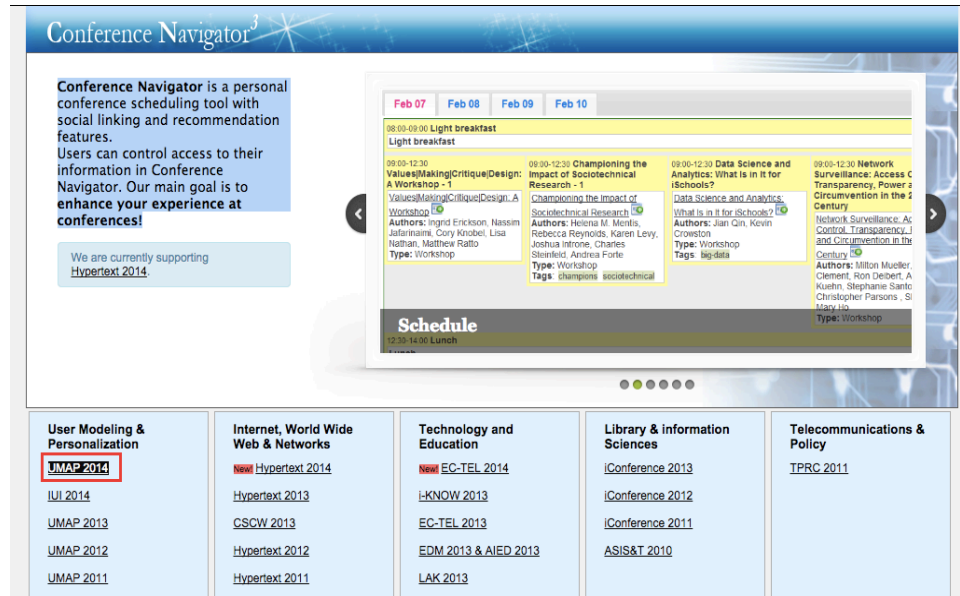


Fig.2 Main Page to select a conference

After we get in UMAP 2014, we can browse only this one conference information (Fig.3).

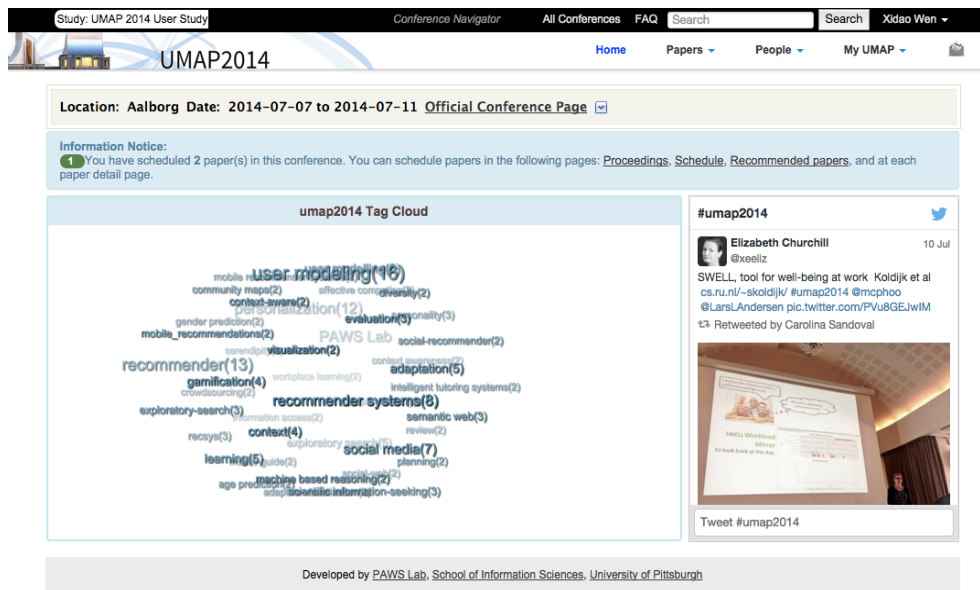


Fig.3 Conference information for UMAP 2014

In fact, users are likely to browser and compare conference information across different conferences. For example, users may want to know what topics and presentations are in different conferences in one community. Therefore, we are aiming to develop conference community functions for users to browse conferences information according to each community.

Technique Overview

We are working on conference community part of the Conference Navigator 3 project.

Below are pages we have modified and created to implement the conference community functions.

- `communityAttendee.php`
- `communityAuthor.php`
- `communityConnection.php`
- `communityUser.php`
- `communityHomePage.php`
- `communityRec.php`
- `communityTop.php`

My Works

- **communityAuthor.php page**
 - Modified getAuthor.php page and created communityAuthor.php page
 - Users can browse authors information according to community
 - Users can also browse authors information according to each conference in the community with the filter tool
- **communityAttendee.php page**
 - Modified getAttendee.php page and created communityAttendee.php page
 - Users can browse attendees information according to community
 - Users can also browse attendees information according to each conference in the community with the filter tool
- **communityConnections.php page**
 - Modified getConnections.php page and created communityConnections.php page
 - Users can browse their connections information according to community
- **communityUser.php page**
 - Modified User.php page and created communityUser.php page
 - Users can browse authors presentations and other following information according to community
- **Documentation**
 - Created documentations for all the work have been done

communityAuthor.php

For communityAuthor.php page, I re-arranged the layout to make it easier for users to browse information according to community. I have also created new sql statements to list all authors. Duplicated authors have been merged. If one author has more than one presentation in the community, each presentation is marked with the conference name and year.

| Academic Profiles | Name | Follow | Connect | Affiliation | Paper title |
|-------------------|------------------------|--------|-------------------|--------------------------------|--|
| | Aaron Quinley | Follow | Add as connection | University of St Andrews | SpiderEyes: Designing Attention- and Proximity-Aware Collaborative Interfaces for Wall-Sized Displays |
| | Achim Ebert | | | | Enhancing Understanding of Safety Aspects in Embedded Systems Through an Interactive Visual Tool |
| | Adam Perer | Follow | Add as connection | IBM Research | Frequency: Interactive Mining and Visualization of Temporal Frequent Event Sequences |
| | Adso Fernandez-Baena | | | | ava!AR - Tangible interaction and augmented reality in character animation |
| | Akiko Aizawa | | | The University of Tokyo | Recognition of Understanding Level and Language Skill using Measurements of Reading Behavior |
| | Alan Wecker | Follow | Add as connection | University of Haifa | Visualizing Sentiment: Do You See What I Mean? |
| | Alessandro Cappelletti | | | | Overt or Subtle? Supporting Group Conversations with Automatically Targeted Directives |
| | Alexander Knorr | | | IEEG and Brain Imaging Group | A Brain-Computer Interface for High-Level Remote Control of an Autonomous, Reinforcement-Learning-Based Robotic System for Reaching and Grasping |
| | Alexander Prange | | | German Research Center for AI | Smartphone Sketches for Instant Knowledge Acquisition in Breast Imaging |
| | Alexander Tsikinovsky | | | | Deploying Recommender System for the Masses |
| | Alwin de Rooij | Follow | Add as connection | City University London | Toward Affect Regulation via Embodied Interaction |
| | Amir Tirosh | Follow | Add as connection | University of Haifa | Improving Business Rating Predictions Using Graph Based Features |
| | Andre Berton | | | Speech Dialog Systems | Comparison of Speech-based In-car HMI Concepts in a Driving Simulation Study Proactivity in Spoken Dialog Systems |
| | Andre Freitas | Follow | Add as connection | | Natural Language Queries over Heterogeneous Linked Data Graphs: A Distributional-Compositional Semantics Approach |
| | Andreas Dengel | | | create | A Mixed Reality Head-Mounted Text Translation System Using Eye Gaze Input |
| | Andreas Forsblom | Follow | Add as connection | | PromotionRank: Ranking and Recommending Grocery Product Promotions Using Personal Shopping Lists |
| | Andreas Schilling | | | Department of Computer Science | User Identification Using Raw Sensor Data From Typing on Interactive Displays |

Fig.4 current CN3 version getAuthor.php

Select to list all conferences information in the community

Conference name to distinguish one presentation from another

| Academic Profiles | Name | Follow | Connect | Affiliation | Paper title |
|-------------------|------------------------|--------|----------------------|-------------|---|
| | A. Baruzzo | | | | UMAP 2009: A General Framework for Personalized Text Classification and Annotation |
| | A. Collins | | | | UMAP 2010: Towards Life-Long Personalization Across Multiple Devices: The Case of Personal Career Management |
| | A. Dattolo | | | | UMAP 2009: A General Framework for Personalized Text Classification and Annotation |
| | A. Di Iorio | | | | UMAP 2009: Customized Edit Interfaces for Wikis via Semantic Annotations |
| | A. D'Az | | | | UMAP 2009: Personal Navigation in Semantic Wikis |
| | A. Fernandez | | | | UMAP 2009: A Collaborative System Based on Reputation for Wide-Scale Public Participation |
| | A. Goy | | | | UMAP 2009: Context-Aware Notification Management in an Integrated Collaborative Environment |
| | A. Marcengo | | | | UMAP 2012: WantEat: interacting with social networks of smart objects for sharing and promoting cultural heritage |
| | A. Musetti | | | | UMAP 2009: Customized Edit Interfaces for Wikis via Semantic Annotations |
| | A. Nauerz | | | | UMAP 2009: New Tagging Paradigms for Content Recommendation in Web 2.0 Portals |
| | A. Rapp | | | | UMAP 2012: WantEat: interacting with social networks of smart objects for sharing and promoting cultural heritage |
| | Aaditshwar Seth | | | | UMAP 2010: Bayesian Credibility Modeling for Personalized Recommendation in Participatory Media |
| | Aaron P. Mitchell | | | | UMAP 2010: Contextual Slip and Prediction of Student Performance After Use of an Intelligent Tutor |
| | Aaron Quinley | Follow | Waiting confirmation | | UMAP 2011: Creating Personalized Digital Human Models Of Perception For Visual Analytics |
| | Abdullah Kayal | Follow | Add as connection | | UMAP 2013: Socially Adaptive Electronic Partners for Socio-geographical Support |
| | Abdulmotaleb El Sadiki | | | | UMAP 2011: Leveraging Collaborative Filtering to Tag-based Personalized Search |

Fig.5 conference_community CN3 version communityAuthor.php

conf_communityID has been created for the page, all the links on the page have been fixed according to community.

From Fig.5, we can find that a filter bar has been added to help users to select which year's conference. It also can list all authors from the same community instead of only one conference. To get all authors information in one community, it is possible that one author has several presentations in different conference. In this case, a time tag has been added to distinguish one presentation from another. For example, in Fig.6, author Alejandro Bellogin has 4 presentations, two from UMAP 2013, and two from UMAP 2011. The new version of CN3 will list all the 4 presentations from the author, and marked with different conference names and presentation names.

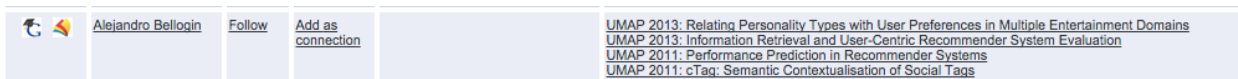


Fig.6 authors with several presentations

communityAttendee.php

For communityAttendee.php page, I re-arranged the layout to make it easier for users to browse information according to community. I have also created new sql statements to list all attendees. Duplicated attendees have been merged. From Fig.7, we can find that a filter bar has been added to help users to select which year's conference. It also can list all authors from the same community instead of only one conference.

Conference Navigator | All Conferences | FAQ | Login | Sign Up





| See All Years UMAP 2013 UMAP 2012 UMAP 2011 UMAP 2010 UMAP 2009 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------------------|--------|----------------------|-------------|----------|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * This list is visible to the conference attendees only | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| All Attendees | Full name starts with | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| Academic Profiles | Name | Follow | Connect | Affiliation | Position | # scheduled papers | Personal website | | | | | | | | | | | | | | | | | | | | |
| | Aaron Quigley | Follow | Waiting confirmation | | | 0 | | | | | | | | | | | | | | | | | | | | | |
| | Abdullah Kaval | Follow | Add as connection | | | 0 | | | | | | | | | | | | | | | | | | | | | |
| | abigail | Follow | Add as connection | | | 1 | | | | | | | | | | | | | | | | | | | | | |
| | Abigail Gertner | Follow | Add as connection | | | 0 | | | | | | | | | | | | | | | | | | | | | |
|  | Adam Moore | Follow | Add as connection | | | 40 | | | | | | | | | | | | | | | | | | | | | |
|  | Adriana Berlanga | Follow | Add as connection | | | 11 | | | | | | | | | | | | | | | | | | | | | |
| | Alan J. Wecker | Follow | Add as connection | | | 13 | | | | | | | | | | | | | | | | | | | | | |
|  | Alan Said | Follow | Already contact X | | | 33 | http://alansaid.com | | | | | | | | | | | | | | | | | | | | |
| | Albert Corbett | Follow | Waiting confirmation | | | 0 | | | | | | | | | | | | | | | | | | | | | |
| | Alberto Manuel | Follow | Add as connection | | | 4 | http://www.process-sphere.pl/ | | | | | | | | | | | | | | | | | | | | |
| | Alberto Quattrini li | Follow | Add as connection | | | 2 | http://home.dei.polimi.it/quattrini.li | | | | | | | | | | | | | | | | | | | | |
|  | Alejandro Belloin | Follow | Add as connection | | | 19 | http://fr.ii.uam.es/~alejandro/ | | | | | | | | | | | | | | | | | | | | |

Fig. 7 communityAttendee.php

conf_communityID has been created for the page, all the links on the page have been fixed according to community.

communityConnections.php

For communityConnections.php page, I re-arranged the layout to make it easier for users to browse information according to community. On this page, user's all connections, connections requests, following and followers are listed. In particular, community attendees are marked as orange color; community authors are marked as green color; both community authors and attendees are marked as red color.

Fig.8 shows the current version of CN3. It only lists user's connections in one conference.

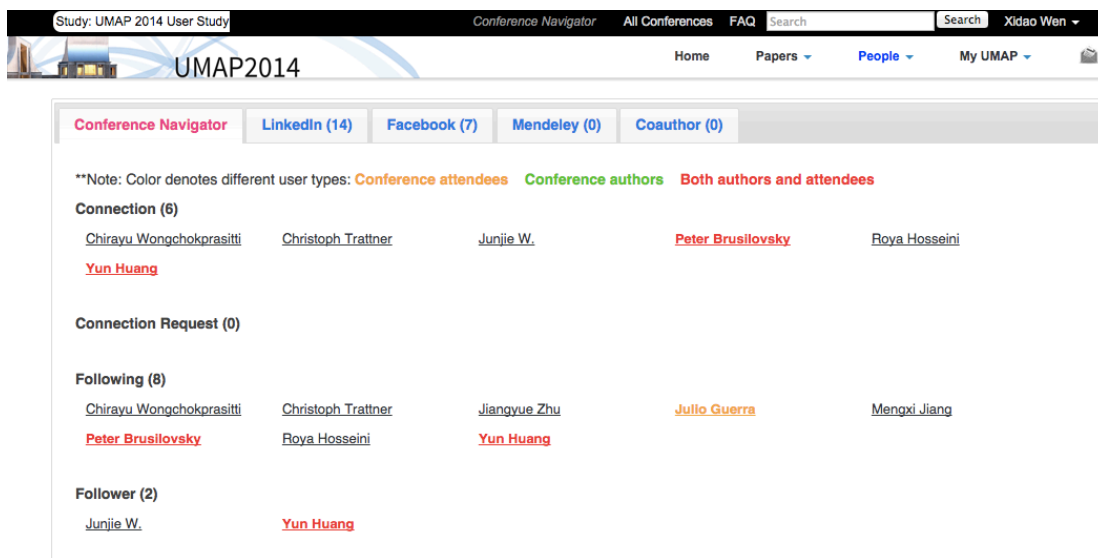


Fig.8 current CN3 version of getConnection.php

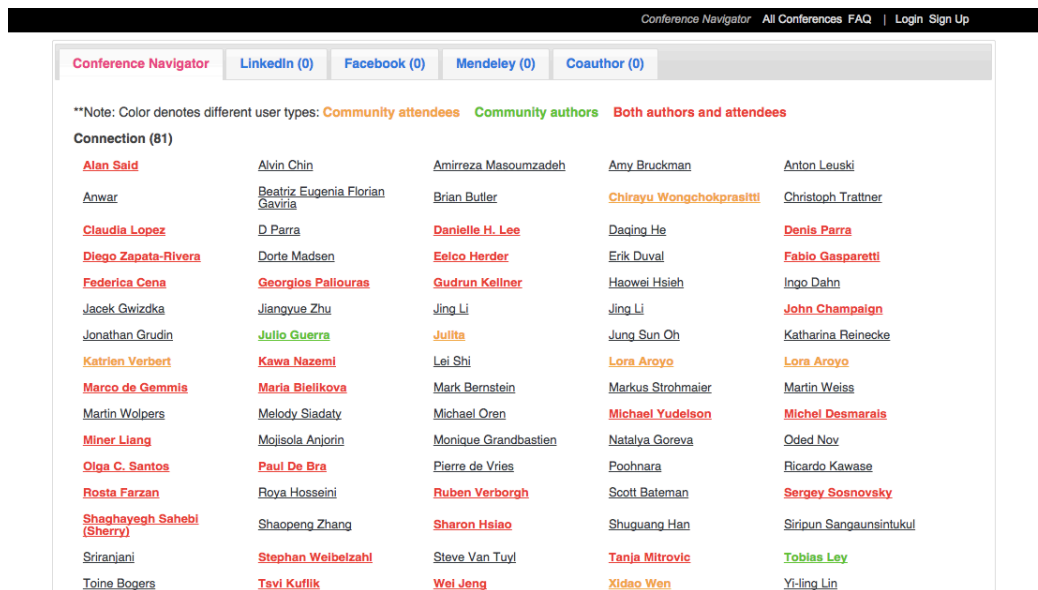


Fig.9 conference_community CN3 version communityConnection.php

conf_communityID has been created for the page, all the links on the page have been fixed according to community.

communityUser.php

For communityUser.php page, all information about users has been listed. In Fig.6, all scheduled presentations according to community are listed. It also shows users' following and followers information.

Under the schedule tab, we can find presentations from conference UMAP 2014 (Fig.10).

The screenshot shows the user profile for Peter Brusilovsky on the UMAP2014 website. The page includes navigation tabs for Home, Papers, People, and My UMAP. The profile section displays social media links (Twitter, Website, LinkedIn) and academic profiles (Google Scholar, Microsoft Academic, Mendeley). The 'Schedule' tab is active, listing three presentations from July 7, 2014, at 11:00-11:20. The first presentation is 'Supporting Exploratory Search Through User Modeling' (PIA 2014 Session 2, Workshop Paper, 7 attending). The second is 'Tourists' Dynamic Needs and Affects in Personalised Travel Route Recommendations' (ProS 2014 Session 2, Workshop Paper, 6 attending). The third is 'Evaluating the Effectiveness of Stereotype User Models for Recommendations on Mobile Devices' (PIA 2014 Session 2, Workshop Paper, 4 attending). On the right, there are lists for 'Follower (75)' and 'Following (51)', each containing a long list of user names.

Fig.10 current CN3 version of user.php

In Fig. 11, a tool bar has been added to select presentations from different conferences in a community.

The screenshot displays a user profile for Peter Brusilovsky. At the top, there are buttons for 'Follow Peter Brusilovsky' and 'Add Peter Brusilovsky as connection'. Below the profile name, there are social media links for Twitter (@peterpaws), a website (http://www.sis.pitt.edu/~peterb/), and LinkedIn. Academic profiles for Google Scholar and Microsoft Academic are also listed. A navigation bar allows selecting a conference year from UMAP 2013 to UMAP 2009. The main content area shows a list of presentations with details such as time, title, session, type, DOI, and the number of attendees. On the right side, there are sections for 'Follower (75)' and 'Following (51)', each listing the names of other users.

Fig.11 conference_community CN3 version communityUser.php

conf_communityID has been created for the page, all the links on the page have been fixed according to community.

Documentation

All documentations about conference_community development have been created under 'documentation' folder, which includes:

- **Created by Ruonan Zhang**
 - communityAttendee
 - communityAuthor
 - communityConnection

- **Created by Jinyuan Liu & Ruonan Zhang**
 - communityUser

- **Created by Jinyuan Liu**
 - communityHomePage
 - communityRec
 - communityTop

Future Works and Improvements

Since different students developed the project, the project is not developed under uniform roles. This makes it more difficult to be understood by current as well as future developers. Although we have created several documentations to help future developers to understand the programs, it still needs additional works to re-arrange the whole project.

Another problem we concurred during our implement is the efficiency of SQL statements. Several exist statements are at low efficiency and need to be improved in the future work.