IFUP 2016: The 2016 International Workshop on Multi-dimensional Information Fusion for User Modeling and Personalization

The international workshop IFUP 2016 will be co-located with ACM UMAP 2016: the 24th Conference on User Modeling, Adaptation and Personalization, held in Halifax, Canada on 13-17 July 2016.

Description

Recently, auxiliary information (e.g., social friends, item content) has been incorporated in many recommendation models to enhance the performance of both rating prediction and item ranking. However, the used auxiliary data is often referred to as single-dimensional information, such as social trust or item category. Many existing studies focus on how to make the best use of a single facet, such as temporal factors or geo-locations to improve recommendations. However, with the advent of context-aware recommender systems, it gets more and more important to incorporate multiple kinds of auxiliary information the case of which is closer to and more prevalent in practice. The information may be either homogenous or heterogeneous. For example, it may be necessary to consider multiple social relationships (e.g., social trust, friendship, membership, followship) simultaneously to make recommendations rather than merely one of them. Another example is that product recommendation may take into account all kinds of users’ historical data, including purchase, click, browse and wanted list. On one hand, information in different dimensions reflects various views of user modeling and preferences. On the other hand, information from different dimensions is often co-related and dependent in some manner. In this regard, it is necessary to consider all these kinds of information as a whole for user modeling and for further improving recommendation performance. Therefore, how to effectively leverage multi-dimensional information and how these dimensions interacting with each other influence recommendations are the two challenging questions the research community need to resolve.

The international workshop IFUP 2016 aims to provide a dedicated forum for discussing open problems, challenges and innovative research approaches in fusing multi-dimensional information for user modeling and recommender systems. The major goal of this workshop is to promote advanced recommendation solutions that can be easily and readily deployed to meet industrial demands for personalized recommendations.

Topics of Interest

The scope of the workshop includes (but is not limited to):

- User modeling
  - User modeling based on social media
  - User modeling based on big data analytics
  - Preference inference based on implicit feedback
• General recommendation problems
  o Social recommender systems
  o Content-based recommender systems
  o Location or POI-aware recommender systems
  o Context-aware recommender systems
• Exploiting homogeneous/heterogenous information
  o Multi-criteria ratings based recommender systems
  o Multi-type social relationships comparison and fusion for recommendations
  o Multi-level and hierarchical item relationships for item recommendations
  o Multi-type implicit feedback fusion for recommender systems
  o Integrating both explicit and implicit feedback for recommendations
  o Cross-domain feedback and knowledge exploitation for recommendations
  o Multi-view learning and cross-device information fusion
  o Online and offline recommendation
  o Personalization for online and offline search social interaction
  o Online and offline recommendation for product purchase, information acquisition and establishment of social relations
• Addressing issues of recommender systems
  o Resolving the cold-start and data sparsity with auxiliary information
  o Enhancing recommendation novelty and explainability
  o Scalability when integrating multiple kinds of auxiliary information
  o Toolkits to improve the reproducibility of recommendation models

Workshop Chairs

• Robin Burke, DePaul University, US
• Feida Zhu, Singapore Management University, Singapore
• Neil Yorke-Smith, American University of Beirut, Lebanon
• Guibing Guo, Northeastern University, China

Programme Committee

• Bin Li, NICTA, Australia
• Xin Liu, Institute for Infocomm Research, Singapore
• Weike Pan, Shenzhen University, China
• Alan Said, CWI
• Yue Shi, Yahoo
• Zhu Sun, Nanyang Technological University, Singapore
• Domonkos Tikk, Gravity R&D
• Yong Zheng, DePaul University, US

Important Dates

Submission Deadline: 7 May 2016
Acceptance Notification: 1 June 2016
Camera-ready Deadline: 7 June 2016
Publication of electronic proceedings: 30 June 2016

**Submission**

All workshop submissions must be formatted according to ACM SIG Proceedings template, and the submissions can be made in either long or short format:

- Long paper: max 8 pages
- Short paper: max 4 pages
- Demo paper: 2-4 pages

Authors should submit original papers in PDF format through the EasyChair system at: [https://easychair.org/conferences/?conf=ifup2016](https://easychair.org/conferences/?conf=ifup2016)

All the accepted manuscripts will be included in the UMAP supplemental proceedings published with CEUR