NEWS RELEASE

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RECSYS 2018 TO EXPLORE FAR-REACHING IMPACT OF RECOMMENDER SYSTEMS

Premier International Conference to Feature Leading-Edge Innovations from Major Tech Companies and Latest Research in Rapidly Growing Field

New York, NY, September 19, 2018 – Our digital lives are increasingly mediated by recommender systems. Whenever we receive a suggestion of a book, song, or article of clothing, or even get word prompts when responding to a text message or email, we are interacting with a recommender system. Although seemingly pervasive, some have referred to recommender systems as "black boxes," since the processes they employ to make suggestions to users seem mysterious. Furthermore, as data scales continue to increase and recommendations make their way into new domains and applications, new innovations are poised to usher in further transformations of our online experiences.

The Association for Computing Machinery's Special Interest Group on Computer-Human Interaction (ACM SIGCHI) will present RecSys 2018, the most important annual conference for the presentation and discussion of recommender systems research in Vancouver, Canada from October 2-7. RecSys will bring together the main international research groups working in recommender systems, along with many of the world's leading e-commerce and media companies.

"It's an exciting time to be working in this field and the RecSys conference is the leading "public square" for this discipline, where researchers from around the world gather together under one roof to learn, share and be inspired," said RecSys 2018 General Co-Chair Michael Ekstrand, an Assistant Professor at Boise State University. "Importantly, to develop effective recommender systems, software teams need to draw on a range of disciplines. RecSys 2018 welcomes contributions from communities as diverse as psychology and mathematics."

General Co-Chair Sole Pera, an Assistant Professor at Boise State University, added, "RecSys looks at recommender systems broadly, both in applications and algorithms, including methods ranging from collaborative filtering and content-based techniques to knowledge-based reasoning and deep learning. The conference is concerned not just with the technical underpinnings of these systems, but also their economical and societal impact."

Now in its 12th year, RecSys has been characterized by strong industry participation. In 2017, for example, industry practitioners represented the majority the 672 attendees. "Among the talks we invited in our call for contributions were specific challenges faced by practitioners that are under-studied in the research community—as well as lessons learned from real-world deployments," said Program Co-Chair Xavier Amatriain, a Co-founder and Chief Technology Officer at Curai.

Program Co-Chair John O'Donovan, an Associate Research Scientist at the University of California, Santa Barbara, commented that "the 2018 program has contributions in many application areas, including travel, entertainment and health. Not surprisingly, there are strong offerings in automated methods that perform learning and optimization for predicting the preferences of consumers."

O'Donovan also discussed how the community's interest in the conscientious use of these technologies is reflected in this year's program. "Recommender systems have been widely adopted to create personalized experiences in e-commerce, social media and many other areas of society," he said. "Because they have such broad societal impact, it is especially great to see many papers in our program on the topic of ethical and socially responsible systems."

The annual RecSys Challenge promises to be another highlight of the conference. This year's challenge focuses on music recommendation. Teams will be given a set of playlists from which a number of tracks have been withheld. Their task will be to predict the missing tracks in those playlists.

RECSYS 2018 HIGHLIGHTS

KEYNOTE ADDRESSES

"Five E's: Reflecting on the Design of Recommendations"
Elizabeth F. Churchill, Google
Many recent case studies have illustrated the unintended consequences of well-intentioned systems. Churchill emphasizes the importance of accountability in the field. In her talk, Churchill will outline the three E's of accountability, arguing systems must be Explainable, Equitable and Ethical, as well as two more E's that she sees as essential to sociotechnical system design and development processes: Expedience and Exigence.

"Scalable Structured Prediction for Richly Structured Socio-Behavioral Data"
Lise Getoor, University of California, Santa Cruz
Online recommender systems, content provider sites, and social media platforms provide richly structured socio-behavioral data. However, using this noisy and incomplete data to make decisions and recommendations is challenging. Getoor will describe some common inference patterns that are useful for socio-behavioral networks and introduce probabilistic soft logic (PSL).

"Recommending Social Cohesion"
Christopher Berry, Canadian Broadcasting Corporation
Public media produces a public good in the form of social cohesion. Generally, countries with strong social cohesion enjoy better security, economies, and qualities of life. Berry discusses how CBC-Radio-Canada has long used technology to bring Canadians together, against all the forces that drive Canadians apart. He also shares insights from his experiences at CBC that he believes may be applied to recommender systems.

RESEARCH PAPERS (Partial List)

"Measuring Anti-relevance: A Study on When Recommendation Algorithms Produce Bad Suggestions"
Pablo Sanchez, University of Cantabria and Alejandro Bellogin, Autonomous University of Madrid
Typically, the performance of recommender systems has been measured by focusing on the amount of relevant items recommended to the users. The authors propose a different perspective on how recommenders behave and the types of suggestions they make. Based on their results, they observe that non-personalized approaches tend to return less bad recommendations than personalized ones;

however, the amount of unknown recommendations is also larger, which explains why the latter tend to suggest more relevant items.

"Exploring Author Gender in Book Rating and Recommendation"
Michael D. Ekstrand, Mucun Tian, and Hoda Mehrpouyan, Boise State University; Mohammed R. Imran Kazi,Texas State University; and Daniel Kluver, Macalester College
Collaborative filtering algorithms find useful patterns in rating and consumption data and exploit these patterns to guide users to good items. The authors examine the response of collaborative filtering recommender algorithms to the distribution of their input data with respect to content creator gender. Using publicly-available book ratings data, they measure the distribution of the genders of the authors of books in user rating profiles and recommendation lists produced from this data.

"Get Me the Best: Predicting Best Answers in Community Question Answering Sites"
Rohan Ravindra Tondulkar, Manisha Dubey, and Maunendra Sankar Desarkar, Indian Institute of Technology Hyderabad
There has been a massive rise in the use of Community Question and Answering (CQA) forums to get solutions to various technical and nontechnical queries. This paper addresses the challenging problem of predicting the best answerer for a new question and thereby recommending the best expert.

INDUSTRY SESSIONS (Partial List)

"Hulu Video Recommendation: From Relevance to Reasoning"
Xiaoran Xu, Hulu
Online video streaming services such as Hulu host tens of millions of premium videos, which requires an effective recommendation system to help viewers discover what they enjoy. Xu will introduce Hulu's recent technical progress in recommender systems and deep-dive into the topic of generating recommendation reasoning from knowledge graphs.

"Learning Content and Usage Factors Simultaneously to Reduce Clickbaits"
Arnab Bhadury, Flipboard
Recommending news and content is often more difficult than classic recommendation problems. At recommendation time, there is often less high quality explicit usage signals like upvotes, shares, dislikes, etc. because articles are relevant for a very short amount of time. Bhadury proposes learning factorized representations of documents using both the content and usage signals simultaneously.

"Conversational Discovery via Comcast X1"
Shahin Sefati , Comcast
The global market for intelligent voice-enabled devices is expanding at a fast pace. Comcast, one of the largest cable provides in the US with about 30 million users, has recently reinvented the way customers can discover and access content on an entertainment platform by introducing a voice remote control for its Xfinity X1 entertainment platform. Sefati describes some of the key components of Xfinity's voice-powered content discovery platform.

WORKSHOPS (Partial List)

Health Recommender Systems
Information systems are becoming more and more intertwined with systems and approaches developed with the purpose of keeping us healthy and increasing our general wellbeing. There are a great variety of fields in which recommender systems can improve our awareness, understanding and behavior

regarding our own, and the general public's health. At the same time, these application areas bring new challenges into the recommender community.

Deep Learning for Recommender Systems
Deep learning is one of the most quickly evolving and interesting research topics in recommendation systems technology. The aim of the workshop is to further promote research in deep learning methods for recommender systems, to bring together researchers from the recommender systems and deep learning communities, and to encourage the application of deep learning techniques in recommender systems.

Responsible Recommendation
Responsible recommendation is a venue for discussing problems of social responsibility in maintaining, evaluating, and studying recommender systems. This workshop welcomes research and position papers about ethical, social, and legal issues raised by the development and the use of recommendation. The workshop will include a discussion for researchers to exchange ideas.

ADDITIONAL HIGHLIGHTS

Women's Breakfast
Since 2014, RecSys has offered a platform where all conference attendees who identify as female can celebrate and connect with other women in the RecSys community. The event provides an opportunity for female attendees to share the challenges and successes of women working within the community and to exchange experiences with one another.

Doctoral Symposium
The Doctoral Symposium provides an opportunity for doctoral students working in recommender systems research to receive critical feedback about their work and to further develop their research under the guidance of distinguished and established researchers in recommender systems.

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