

SIE: Characterize iSchool Research Territory via Scholarly Data

Xiaozhong Liu¹, Wei Lu², Ying Ding¹, Sam Wunells¹

¹School of Informatics and Computing, Indiana University Bloomington

²School of Information Management, Wuhan University

Abstract

Comparing with other academic units, iSchool research can be more interdisciplinary and dynamic. In this SIE, we will organize a collaborative study with the goal of characterizing iSchool research territory. Meanwhile, Thomas Reuters will support this competition by providing us high quality scholarly data focusing on iSchool researchers. Unlike most prior SIEs, the proposed study will encourage iSchool researchers' participation. We will organize the presentations and discussions at the conference session as well provide awards to the selected study winners, which will make this event appeal to the audience both with respect to content and format.

Keywords: iSchool; Research; Scholarly Data; Competition

Citation: Liu, X., Lu, W., Ding, Y. & Wunells, S. (2017). SIE: Characterize iSchool Research Territory via Scholarly Data. In iConference 2017 Proceedings, Vol. 2 (pp. 163-165). <https://doi.org/10.9776/17502>

Copyright: Copyright is held by the authors.

Contact: liu237@indiana.edu

1 Introduction

“While each individual iSchool has its own strengths and specializations, together they share a fundamental interest in the relationships between information, people, and technology.” This is the classical definition of iSchool from <http://ischools.org>. It is clear that, comparing with other disciplines and academic units, iSchool research can be more interdisciplinary and dynamic, and we can hardly characterize iSchool research in an easy way.

In this SIE, participants are expected to characterize iSchool research territory in a larger scientific environment by leveraging novel scholarly data. For instance, by using information retrieval, data analysis, Bibliometrics, information visualization, data mining, etc. methods, participants can investigate and propose a number of interesting and novel questions. The proposed ideas are not necessarily restricted to the following exemplar topics:

1. What are the most important research topics of iSchool?
2. What are each individual iSchool's strengths and specializations?
3. How iSchool researchers collaborate with other scholars? Do iSchool researchers prefer to collaborate with the scholars from other domains?
4. In the past few years, which topics are getting increasingly popular in iSchool and which are decaying?
5. Which iSchool topics are more likely contributed by external research communities?
6. How can one effectively visualize iSchool territory in a larger context?

For all the SIE participants, we will release a novel scholarly dataset from Thomas Reuters Digital Library, e.g., author, publication, citation, and venue, from the most important iSchool venues, i.e., the key conference proceedings and journals in information science. Participants do not necessarily use all the data. However, we expect each participant will use this dataset and the reasonable methodology to address the proposed research question(s).

The proposed SIE is designed to appeal the iSchool researchers (especially PhD students and junior scholars) who have experience and interest in scholarly data analysis. Meanwhile, the expected outcomes of this SIE will generate a more board impact on scholarly data mining and Bibliometrics communities. The organizers will design website and send out call for participation through different channels, e.g., email lists and special invitations.

2 Important Date

For this SIE, organizers will encourage iSchool researchers (especially PhD students and junior scholars) to submit their proposed problems and solutions via the EasyChair system. Meanwhile, we will enable collaborations between the participates. For instance, each participate can publish and advertise his/her proposed idea on the SIE website, and other researchers could join his/her team for collaboration. The selected ideas will be presented in the SIE session during iConference, and the organizers and presenters will lead the discussions in the session. For this SIE, we will follow the following timeline:

- Online registration: TBD
- Dataset release: November 15, 2016
- Paper submission: January 20, 2016
- Announcement of results: February 20, 2017
- Conference presentation: March 24, 2017

3 Awards

For this SIE, in order to encourage participation, we will offer awards to the selected winners. 1st Prize, 2nd Prize and 3rd Prize winners will be selected by the judge committee which consists of 3-5 domain experts from iSchools. Awards for winners will include a certain amount of monetized reward. Moreover, after the SIE, participants may be invited to submit the proposed study to Journal of Data and Information Science journal (one SIE organizer Dr. Ying Ding is one of the journal Co-Editors-in-Chief).

4 Organizing Committee

Xiaozhong Liu, Indiana University Bloomington: Dr. Xiaozhong Liu is an Assistant Professor at Department of Information and Library Science, School of Informatics and Computing, Indiana University Bloomington. His research interests include information retrieval, natural language processing, text/graph mining, digital library, metadata, and human computing. His dissertation at Syracuse University explored an innovative ranking method that weighted the retrieved results by leveraging dynamic community interests. In contrast to most existing studies in scientific resource recommendation, his research developed an enhanced understanding of the scholarly network from a topical content perspective and investigated the use of full-text citation data to improve the overall recommendation ranking performance (Jensen, Liu, Yu, & Milojevic, 2016). Meanwhile, the proposed algorithms/system help students and scholars understand the challenging scientific publications and formulas (Liu, Jiang, & Gao, 2015).

Wei Lu, Wuhan University: Dr. Wei Lu is the professor and the vice dean of School of Information Management, Wuhan University. His research interests include information retrieval, data mining and academic document understanding. He was also recently elected as Youth Yangtze River Scholar by the Ministry of Education of the People's Republic of China. He did his postdoc at City University London, and worked as a visiting researcher at Royal School of Library Science, Denmark. He has published dozens of papers in journals, conferences and workshops.

Ying Ding, Indiana University Bloomington: Dr. Ying Ding is the Associate Director of Data Science Online Program and will serve as the primary advisor for the Data Science Online and Certificates Program, as well as an Associate Professor at School of Informatics and Computing, Indiana University. She was recently elected as Yangtze River Scholar by the Ministry of Education of the People's Republic of China. The Yangtze River Scholar award is the highest academic honor given by the People's Republic of China. Previously she worked as a senior researcher at the University of Innsbruck, Austria and as a researcher at the Free University of Amsterdam, the Netherlands. She has been involved in various NIH and European-Union funded Semantic Web projects. She has published 170+ papers in journals, conferences and workshops.

5 Acknowledge

This SIE is supported by Thomas Reuters Digital Library, and Thomas Reuters will provide scholarly data to all the SIE participants.

References

- Jensen, S., Liu, X., Yu, Y., & Milojevic, S. (2016). Generation of topic evolution trees from heterogeneous bibliographic networks. *Journal of Informetrics*, *10*(2), 606–621.
- Liu, X., Jiang, Z., & Gao, L. (2015). Scientific information understanding via open educational resources (oer). In *Proceedings of the 38th international acm sigir conference on research and development in information retrieval* (pp. 645–654).