

Spring 2015 Seminar Series

Presented by the CS Division

SUMMARIZING INFORMATION IN BIG DATA: ALGORITHMS AND APPLICATIONS

FRIDAY APRIL 3, 2015

10:00 AM – HEC 450

Information floods the lives of modern people, and we find it overwhelming. Summarization systems that identify salient pieces of information and present it concisely can help.

In this talk, I will discuss both algorithmic and application perspectives of summarization. Algorithm-wise, I will describe keyword extraction, sentence extraction, and summary generation, including a range of techniques from information extraction to semantic representation of data sources; application-wise, I focus on summarizing human conversations, social media contents, and news articles. The data sources span low-quality speech recognizer outputs and social media chats to high-quality content produced by professional writers. A special focus of my work is exploring multiple information sources. In addition to better integration across sources, this allows abstraction to shared research challenges for broader impact. Finally, I try to identify the missing links in cross-genre summarization studies and discuss future research directions.

DR. FEI LU

Carnegie Mellon University

Fei Liu is a postdoctoral fellow at Carnegie Mellon University, member of Noah's ARK. Fei's research interests are in the areas of natural language processing, machine learning, and data mining, with special emphasis on automatic summarization and social media. From 2011 to 2013, Fei worked as a Senior Research Scientist at Bosch Research, Palo Alto, California, one of the largest German companies providing intelligent car systems and home appliances. Fei received her Ph.D. in Computer Science from the University of Texas at Dallas in 2011, supported by Erik Jonsson Distinguished Research Fellowship. Prior to that, she obtained her Bachelors and Masters degrees in Computer Science from Fudan University, Shanghai, China. Fei has published over twenty peer reviewed articles, and she serves as a referee for leading journals and conferences.

Hosted by: Dr. Mark Heinrich

