

TIGP SNHCC 2016 Fall Syllabus

Data Mining in Social Networks (DM)

Place: Room 108, Old Building, IIS, AS

Time: 9:00-12:00 Thurs or 1400-1700 Thurs

Chair: Dr. M. K. Shan

Outline: In this course, the following topics will be presented and discussed: social media analysis, blogs and friendship network analysis, email and messaging analytics, influence spreading and viral marketing, social reputation and trust, user profiling and recommendation systems, social media searches, expertise and authority discovery, community identification, link prediction, collaborative data analysis, and data mining with social factors.

Textbook: Social Network Data Analytics, Charu C. Aggarwal (Ed.), Springer 2011

Reference: Data Mining: Concepts and Techniques, J. Han, M. Kamber, and J. Pei, 3rd edition, Morgan Kaufmann, 2011.

Introduction to Data Mining, P.N. Tan, M. Steinbach, and V. Kumar, Addison Wesley, 2006.

R. Zafarani, M. A. Abbasi, and H. Liu, Social Media Mining: An introduction, Cambridge University Press, 2014

TA: Khurshed Ali (khurshedmemon@gmail.com)

Office hours: by appointment

Grades: Midterm exam 50%. Project 50%

Week	Date	Topics/Brief Description	Lecturers
1	2016/09/15	Moon Festival	
2	2016/09/22 PM	An Introduction to Data Mining & Social Networks	Man-Kwan Shan
3	2016/09/29 PM	Frequent Pattern Mining	Man-Kwan Shan
4	2016/10/06 PM	Clustering	Man-Kwan Shan
5	2016/10/13 AM	Classification Techniques I	Yi-Shin Chen
6	2016/10/20 AM	Classification Techniques II	Yi-Shin Chen
7	2016/10/27 PM	Graph Essentials and Network Measures	Mi-Yen Yeh
8	2016/11/03 PM	Social Network Properties and Network Models	Mi-Yen Yeh
9	2016/11/10 PM	Community Analysis (I): Community Detection	Mi-Yen Yeh
10	2016/11/17 PM	Community Analysis (II): Community Evolution and Evaluation	Mi-Yen Yeh
11	2016/11/24 PM	Mid-term Exam.	
12	2016/12/01 AM	Privacy in Social Networks: A Survey	De-Nian Yang
13	2016/12/08 AM	Project Proposal	Yi-Shin Chen
14	2016/12/15 AM	Text Mining in Social Networks	De-Nian Yang
15	2016/12/22 AM	A Survey of Link Prediction	De-Nian Yang
16	2016/12/29 AM	A Survey of Models and Algorithms for Social Influence Analysis	Yi-Shin Chen
17	2017/01/05 AM	An Overview of Social Tagging.	Yi-Shin Chen
18	2017/01/12 (TBA)	Project Presentation	Yi-Shin Chen De-Nein Yang Mi-Yen yeh Man-Kwan Shan