

# TIGP SNHCC 2015 Fall Syllabus

## Data Mining in Social Networks ( DM )

**Place:** Room 101, New Building, IIS, AS

**Time:** 9:00-12:00 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, 3<sup>rd</sup> edition, Morgan Kaufmann, 2011.  
Introduction to Data Mining, P.N. Tan, M. Steinbach, and V. Kumar, Addison Wesley, 2006.

**TA:** Imad ali < ali.imad692 at gmail.com >

**Office hours:** by appointment

**Grades:** Midterm exam 40%. Final Project 60%

Week	Date	Topics/Brief Description	Lecturers
1	2015/09/17	Chapter 1: An Introduction to Data Mining & Social Networks	Man-Kwan Shan
2	2015/09/24	Frequent Pattern Mining I	Man-Kwan Shan
3	2015/10/01	Frequent Pattern Mining II, Clustering I	Man-Kwan Shan
4	2015/10/08	Clustering II	Man-Kwan Shan
5	2015/10/15	Classification Techniques I	Kuo-Wei Hsu
6	2015/10/22	Classification Techniques II	Kuo-Wei Hsu
7	2015/10/29	Midterm Exam	
8	2015/11/05	Chapter 2: Statistical Properties of Social Networks	Cheng-Te Li
9	2015/11/12	Chapter 4 Community Discovery in Social Networks: Applications, Methods and Emerging Trends	Cheng-Te Li
10	2015/11/19	Chapter 5 Node Classification in Social Networks	Cheng-Te Li
11	2015/11/26	Chapter 6 Evolution in Social Networks: A Survey	Cheng-Te Li
12	2015/12/03	Chapter 9 A Survey of Link Prediction	De-Nian Yang
13	2015/12/10	Proposal Presentation	Yi-Shin Chen
14	2015/12/17	Chapter 10 Privacy in Social Networks: A Survey Chapter	De-Nian Yang
15	2015/12/24	13 Text Mining in Social Networks	De-Nian Yang
16	2015/12/31	Chapter 7 A Survey of Models and Algorithms for Social Influence Analysis	Yi-Shin Chen
17	2016/01/07	Chapter 16 An Overview of Social Tagging.	Yi-Shin Chen
18	2016/01/14	Final Project	