

TIGP SNHCC 2019 Fall Syllabus

Data Mining in Social Networks (DM)

Place: Room 101, New Building, IIS, AS / Delta 601, NTHU

Time: 9:00-12:00 Thurs

Chair: Dr. Yi-Shin Chen

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.

TA: Martin (ng_siu hin@yahoo.com) **Office hours:** by appointment

Grades: Exam 50%, Project 50% **For the most updated syllabus, please visit <https://tigpsnhcc.iis.sinica.edu.tw/course.html#s1>**

Week	Date	Topics/Brief Description	Lecturers
1	2019/09/12	Introduction to Social Network Mining	Ming-Feng Tsai
2	2019/09/19	Review of Data Mining Techniques: Frequent Pattern Mining, Clustering	
3	2019/09/26	Review of Data Mining Techniques: Classification, Dimensionality Reduction	
4	2019/10/03	Graph Essentials and Network Measures	Mi-Yen Yeh
5	2019/10/10	Double Tenth_No class	-----
6	2019/10/17	Social Network Properties and Network Models	Mi-Yen Yeh
7	2019/10/24	Community Analysis (I): Community Detection	
8	2019/10/31	Community Analysis (II): Community Evolution and Evaluation	
9	2019/11/07	Python Tools for Social Network Mining	Yi-Shin Chen@ Delta 601, NTHU
10	2019/11/14	A Survey of Link Prediction	De-Nian Yang
11	2019/11/21	Privacy in Social Networks: A Survey	
12	2019/11/28	Text Mining in Social Networks	
13	2019/12/05	Exam	
14	2019/12/12	Project Proposal	Yi-Shin Chen @ Delta 601, NTHU
15	2019/12/19	A Survey of Models and Algorithms for Social Influence Analysis	
16	2019/12/26	Social Emotion Analysis	
17	2020/01/02	Project Preparation_No Class	-----
18	2020/01/09	Project Presentation	DM Faculty

