

TIGP SNHCC 2020 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.

References:

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

Grades: Exam 30%, Homework 40% Project 30%

For the most updated syllabus, please visit <https://tigpsnhcc.iis.sinica.edu.tw/course.html#s1>

Week	Date	Topics/Brief Description	Lecturers
1	2020/09/17	Class Introduction	Yi-Shin Chen
2	2020/09/24	Review of Data Mining Techniques	@Delta 601, NTHU
3	2020/10/01	Mid-Autumn Festival (no class)	
4	2020/10/08	Review of Data Mining Techniques	Yi-Shin Chen @Delta 601, NTHU
5	2020/10/15	Introduction to Social Networks	Mi-Yen Yeh
6	2020/10/22	Lab 1 / Homework 1 Python Tools for Graphs	Yi-Shin Chen @Delta 601, NTHU
7	2020/10/29	Community Detection	Mi-Yen Yeh
8	2020/11/05	Graph Embedding	
	2020/11/06	Prerequisite Exam on Statistics and Probability	Ronald Y. Chang
9	2020/11/12	Recommendation Systems I	Ming-Feng Tsai
10	2020/11/19	Recommendation Systems II Project Progress Report (I)	
11	2020/11/26	A Survey of Link Prediction	De-Nian Yang
12	2020/12/03	Text Mining in Social Networks	
13	2020/12/10	Privacy in Social Networks	
14	2020/12/17	Exam	
15	2020/12/24	Lab2 / Homework 2: Python Tools for Text Mining	Yi-Shin Chen
16	2020/12/31	Project Progress Report (II)	@Delta 601, NTHU
17	2021/01/07	Prepare for Project	-----
18	2021/01/14	Project Presentation	DM Faculty