

Analysis and Modeling of Social and Information Networks
CIS 4524/5524, Spring 2021

Assignment 7

Due: 1pm on March 20, 2021 (submit on Canvas)

Problem: Write a research proposal for the class project that you plan to perform. Two undergraduate students can collaborate on a single project. Also, an undergraduate student can collaborate with a graduate student, but collaboration of two graduate students is not allowed. Explain what data you plan to use in the study. Some large network datasets you can obtain at <http://snap.stanford.edu/data/>

Following are examples of the project topics approved last time the CIS 4524/5524 was offered:

- Temporal Weather Data to Predict Solar Irradiance for Solar Power Stations
- Characterizing summarization on synthetic multiplex networks
- Analyzing ConceptNet for Redundancy Reduction and Improved Inference Control
- Network Robustness of the Pennsylvania Road Network
- Methods Forecasting Amazon Product Recommendations by Link Prediction Methods
- Disease Prediction from Existing Diseases
- Spatially-Aware Mixture Models for Outage Cause Prediction
- Friend Suggestion System
- Identifying Political Bubbles on Reddit
- Network Science to Fight Financial Crime
- Reconstructing Chain Transmissions from Inferred Molecular Transmission Network
- Are behaviors Contagious in the Hemodialysis Clinic?
- Predicting rating of restaurant on Yelp platform
- An Analysis of the Networks and Communities of President Trump's Tweets

Proposal format:

Your name and **e-mail address**

Title

Objective and Significance

Background

Proposed Approach

References

The description may not exceed 2 pages in 12 pt style.