## **COSC 710 Social Network Analysis**

## **Assignment 02**

In this project, we will analyze social trace collected from My Starbuck Idea (mystarbuckidea.force.com – unavailable now). Starbuck Idea was an online social platform where users can propose their ideas to Starbuck company, get feedbacks, voting and comments from other users. My Starbucks Idea allowed its clients to propose new ideas for different categories such as Product, In-Store Experience and Community Involvement ideas. Good ideas, just like other good products, would receive a significant amount of attention, promotion and votes from experts, the firms' contributors as well as other clients. These stand-out ideas, if chosen, would be implemented in real life. Ideas that foster limited to no interest, on the other hand, would not receive much attention or promotion and will be buried as new ideas emerge.

For the scope of this assignment, you are given the real idea collected from My Starbuck Idea, model and analyze the data under the complex network concept and answer the following emerging questions:

- 0. How would you transform the raw data to a complex network model using directed/undirected and weighted/unweighted graphs?
- I. What are the underlying community structures of these social sites, i.e., what are the underlying groups of users and how are they structured? What are the inner and inter connections between groups of users in the networks?
- 2. Do those networks display unique or special ties between different roles of users, i.e., experts, the firms' contributors and the regular clients and posters? Is there any political or special influence between those ties?
- 3. What will be the main factors that make an idea that has emerged from the crowd stand out and grow or be diminished and buried? What kind of support or promotion does it need and from whom (experts, firm contributors or just regular clients)? Are there some models or logistic equations with social network independent variables and controls that predict the lifetime or the development of an idea?

## Suggestions:

Step 0 is important to construct your network from the raw data. Make SQL queries to the database to

- + Construct the graph of user user interaction for each topics
- + Construct the graph of user topic interactions

The collected data will be posted on Blackboard.