

# Social Network Simulator

## Progress Report

May 13, 2013

Bing Zhang

### *Description*

I plan to design and implement a NetLogo model of an online social network to simulate how news is spread in social network and how social network are grown.

The final version of the simulator is still under determination. One of my choices might be to simulate how many people with different opinions will read information from their opponent.

### *How to implement*

There are two types of agent, people and news.

The agent people form a social network. The news can spread following the social network. As the news spread, the social network is growing as well. I will set a time limit for news. If time reaches the limit, the news will disappear and we can create another piece of news to spread.

Initially, people will form a social network. News sits on one of nodes. When the spread start, the news will potentially go to all linked neighbors. If that neighbor reads the news (a possibility) and thinks the news is interesting (another possibility), he will take the news and further spread it. The news as agent becomes older and older, and dies eventually.

### *Model Output*

Currently, the model should count how many people received the news within certain time.

### *Questions*

Currently I am having problems let news move and spread as color spread across the network. Besides, I am thinking the best way to initialize the network so that the initial network is closer to real situation.

### *Nest Steps*

In next step I will extend the model and divide the people into different group with different interest. At the same time, the news also has different types.