

The frame of what we need to solve in the proposal (after 1st review)

### 1. Leading question?

(1) What is the question?

Find the central disseminator of the fake news.

(2) Steps to solve the problem?

a) Do we need weight:

assign weight on our own (by percent of similar features between two nodes)

b)

### 2. Dataset?

(1) Which dataset?

ego-Twitter

(2) Error-handle

a) What error could happen?

b) How to handle these errors?

### 3. Traversal, algorithm(in class), algorithm(out of class)

Aim? Input? Output?  $O(n)$ ?

### 4. timeline

Time Spread: five weeks

Week 1 (Nov 8th, Nov 14th):

Our general aim is to polish up the proposal and finish data acquisition and most part of data processing.

If there is

Week 2 (Nov 15th, Nov 21st)

Week 3 (Nov 22nd, Nov 28th)

Week 4 (Nov 29th, Dec 5th)

Week 5 (Dec 6th, Dec 12th)

Handwritten notes on a piece of paper, organized into sections:

- fake news 源头** (Source of fake news)
  - 2. 传播路径 (Propagation path)
    - 加消息的几率最小/大? (Probability of adding message is minimum/maximum?)
    - 最短路径: Dijkstra (Shortest path: Dijkstra)
    - Q1: gossip maker
      - ① circle 大小 (Circle size)
      - ② degree (Degree)
      - ③ circle feature (Circle feature)
    - $\sum C_i * N_i + degree * 系数$
    - ④ 权重 (Weight)
      - $A \rightarrow B$
- ID** (ID)
  - edge: 关注了谁 (edge: who followed)
  - feat: 关注的人的特点 (feat: features of the person followed)
  - ego feat: 自己的特点 (ego feat: own features)
  - feat name: feat 名称 based on user A B C D
  - circle: ① ID ② ID ③ ID ... (circle: ① ID ② ID ③ ID ...)
  - ④ 图  $E \begin{cases} \leq N^2 \text{ 稠} \\ \approx N^2 \text{ 稠} \end{cases}$
  - ⑤  $[N]$  vector
  - ⑥ 前向星
- A B** (A B)
  - 谁收到了信息 (Who received the information)
  - $A \text{ follows } B + \text{circle} + \text{feature}$
  - Table:

	0	102		1
A	0	102		1
B	0	103	704	2
Z	104			1

