# Group Detection Inside Communities

Use Case: Detect groups of multi-discipline people in LinkedIn

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## The Problem



#### The Problem

Multidisciplinary teams are common!

 people have common attributes like to join in the same group

Companies are looking for those people!

### Proposal & Hypotheses

Detect interesting people for Multi discipline positions

Multi discipline people define sub communities!

#### **Data**

LinkedIn API for users and communities

Will try to apply model to positions dataset

#### Method

- Link prediction method
  - Jaccard coefficient
- Measure
  - Cross-validation
- Evaluation
  - Train/Test evaluation

#### related work

- Group detection in complex networks (Lovro Šubelj)
  - General group detection
  - hierarchy discovery and link prediction tasks

- Group detection for synchronous Gaussian codedivision multiple-access channels (M.K. Varanasi)
  - used generalized likelihood ratio test

#### timeline

- Oct.20: proposal
- Oct.31: processing the data
- Nov.14:finish the program and debug
- Nov.21:analysis the results
- Dec 1:presentation

# Thanks!