Movie Selector

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Outline

Introduction

Background

Methodology

Discussion

Future Work

DEMO

Movie Selector

What does it do?

- Suggests the **five best-unwatched** movies
- Considers **trust** relationships
- Takes only **two seconds**

In this study,

- Gonul and Yavuz Score
- Case studies
- The FilmTrust dataset

Dataset

ratings.txt

- 35496 triples **(user, movie, rating)**
- Each user is a unique integer
- Each movie is a unique integer
- Rating between **0-4**

trust.txt

- 1852 triples **(user1, user2, trust)**
- Trust is **boolean**

Trust Graphs

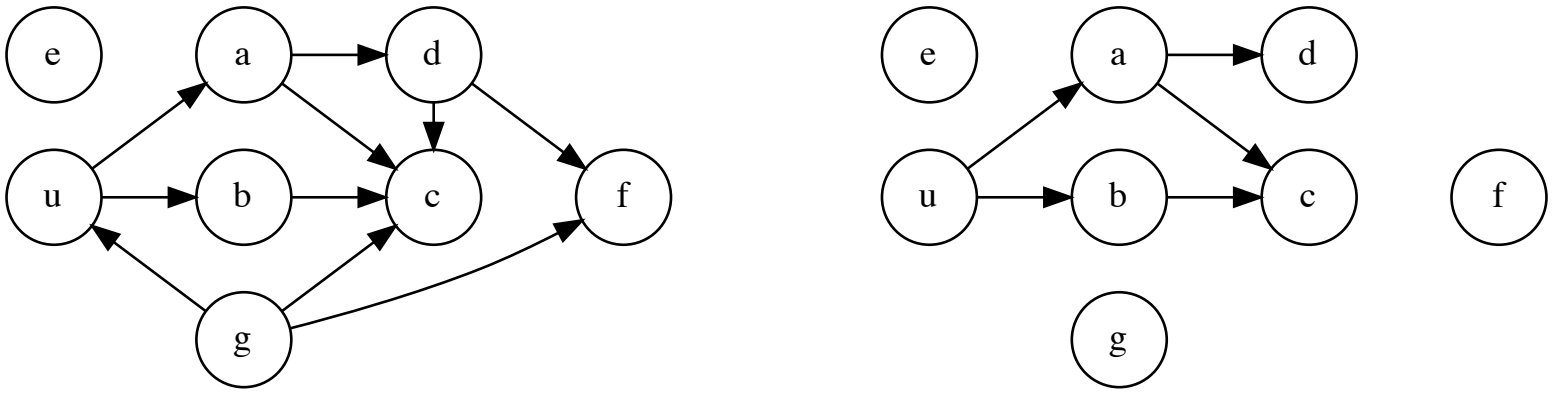

Figure: An example Trust Graph (on the left) for an arbitrary movie m and its bounded version (on the right) w.r.t. the user u

Scoring Functions

- **Naive Score**: Average of all ratings
  - Not good
- **Yavuz Score**:

$$Y_u(m) = s_{1,m}(u) + \lambda s_{2,m}(u) + \lambda^2 \sum_{n=3}^{\infty} s_{n,m}(u)$$

- **Gonul Score**:

$$G_u(m) = \begin{cases} s_{1,m}(u) + \lambda s_{2,m}(u) & |\{k : N_{u,m}(k) = 1\}| > 0 \\ \lambda^2 s_{\infty,m}(u) & o/w \end{cases}$$

- $\lambda = .5$ decay factor

Issues

- Separate from previous project
  - We assume
    - **Already decided** to watch a movie
    - The schedule is **already planned**
    - **Nothing to interrupt**
- Gonul Score is the most **reasonable**
  - A matter of taste and culture
- A friend can **also be a friends' friend**
  - Count as friend

Future Work

How to improve when there are no friends?

- Existence of **correlation** between user ratings
- **Ranks** friends

Genre choices

- **CiaoDVD** dataset includes genres
- Integrate **genre choices**

PROCEED TO DEMONSTRATION