

Course Introduction: Nearest Neighbor Collaborative Filtering

Collaborative Filtering

- Ignore User and Item Attributes
- Focus on User-Item Interactions
- Pure Behavior-Based Recommendation

Key Concepts

- Nearest Neighbor Collaborative Filtering
- User-User CF Algorithm
 - Neighborhoods and Tuning Parameters
 - Alternatives to Historic Agreement (social, trust)
- Item-Item CF Algorithm
 - Dealing with Unary Data
 - Hybrids and Extensions
 - Practical Implications
- Advanced Topics
 - Cold Start, Groups, Explanations, Threats

Course Structure

- User-User Collaborative Filtering (weeks 1-2)
 - Assignment (implement in spreadsheet)
 - Honors Assignment (implement in LensKit)
 - Quiz
- Item-Item Collaborative Filtering and Advanced Topics (weeks 3-4)
 - Assignment (implement in spreadsheet)
 - Honors Assignment (implement in LensKit)
 - Quiz

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