



IMDb Search System

Small Improvements



- 1** Filters
 - Remove redundant filters
 - Add BeiderMorseFilterFactory

- 2** Synonyms

Small Improvements



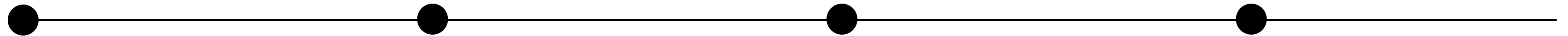
- 1** Filters
 - Remove redundant filters
 - Add BeiderMorseFilterFactory

- 2** Synonyms

Results?

Hypothesis 1

***Signals
Exploration***



**Calculate
Increaser**

Average Rating
Number of votes

Scaling

Min Max Scaler

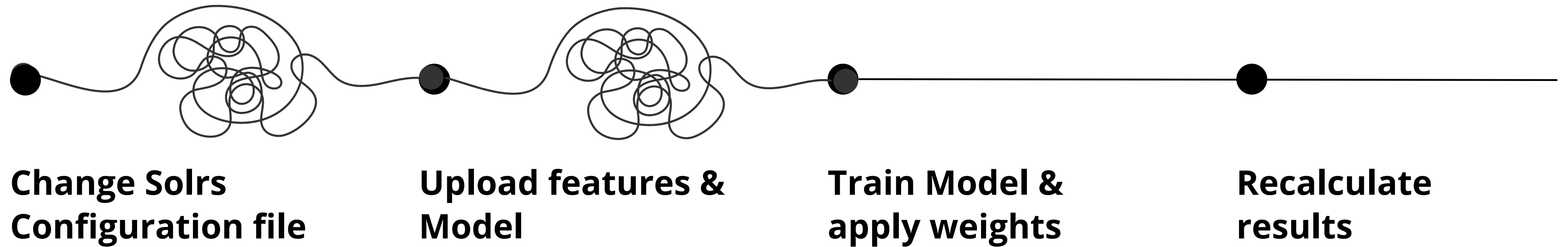
**Add to Solr's
default score**

Reorder results



Hypothesis 2

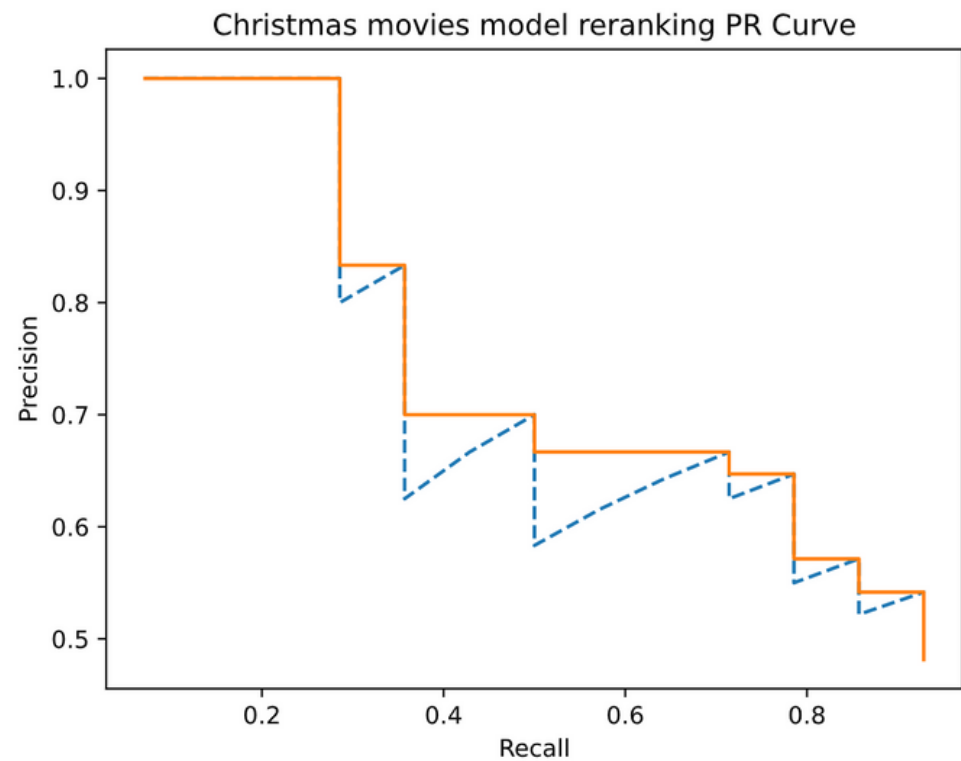
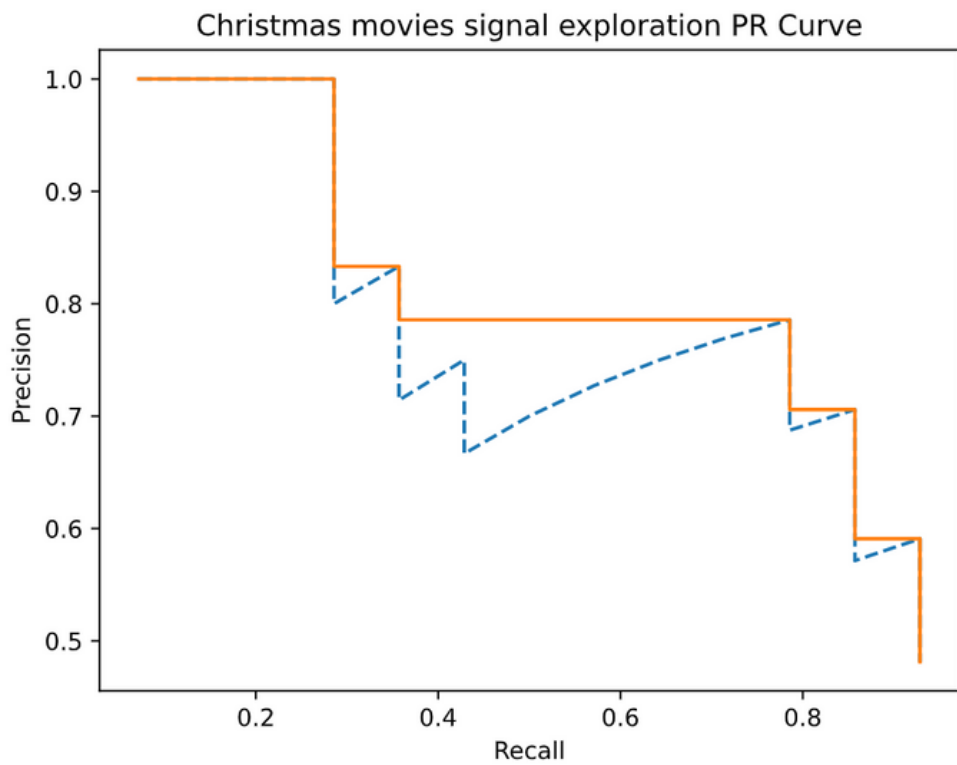
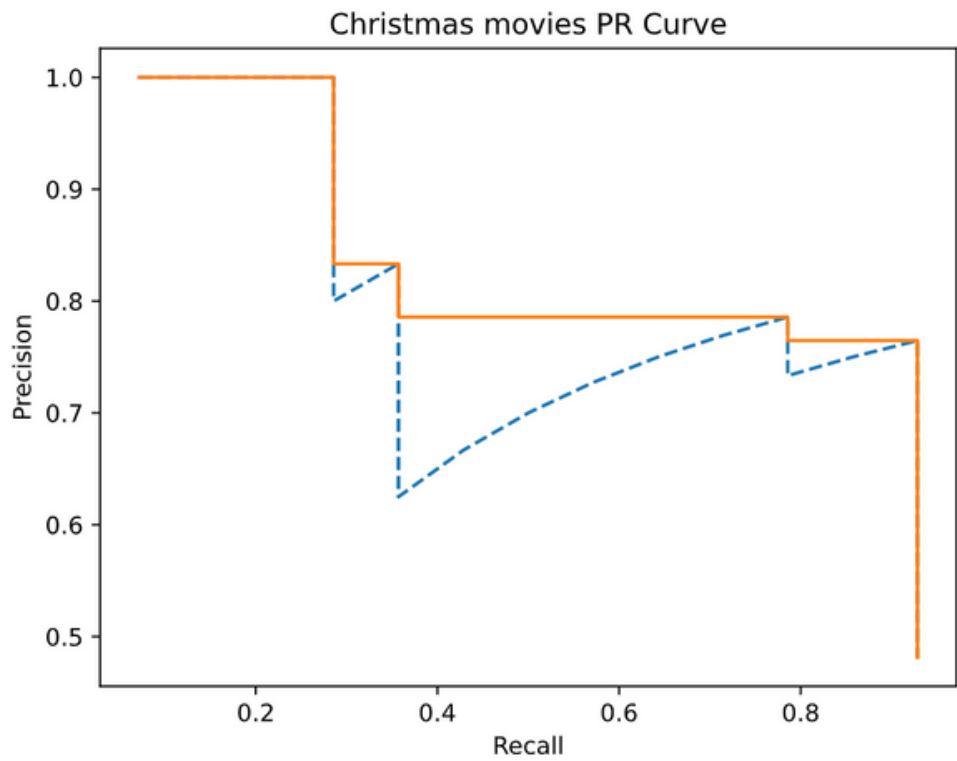
Learn to Rank



Results

Christmas Movies

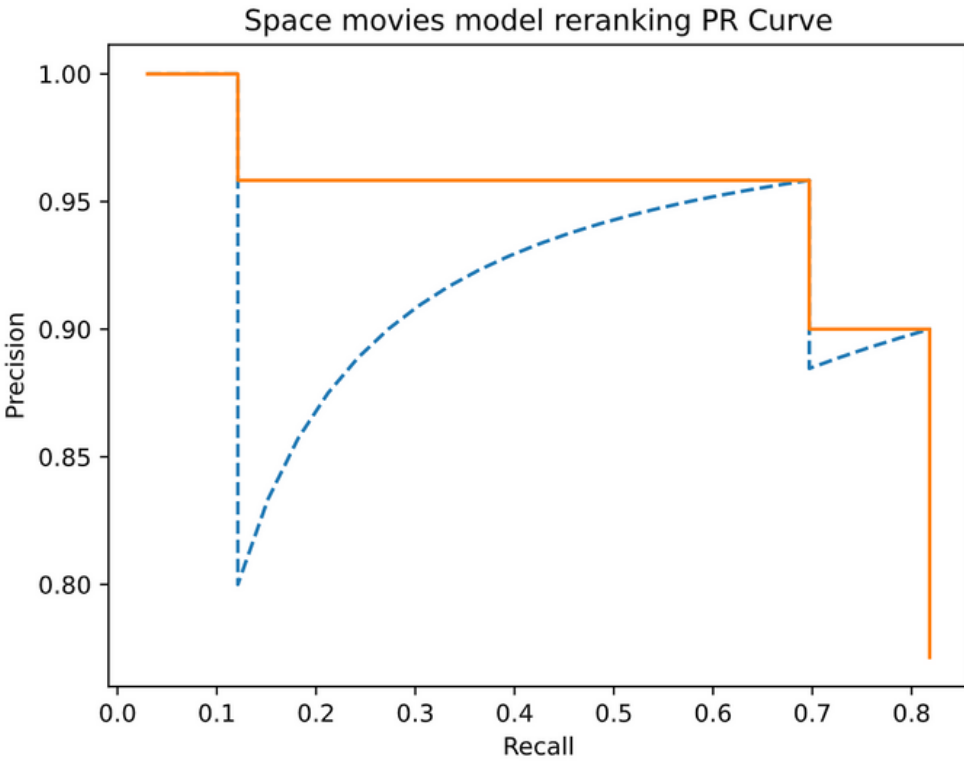
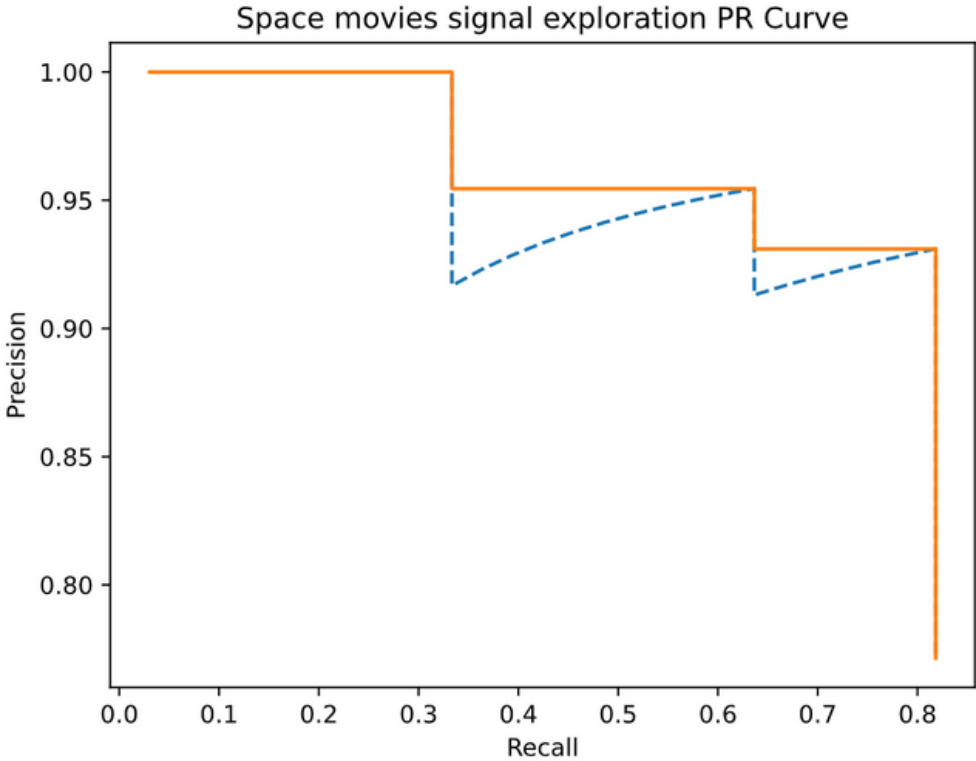
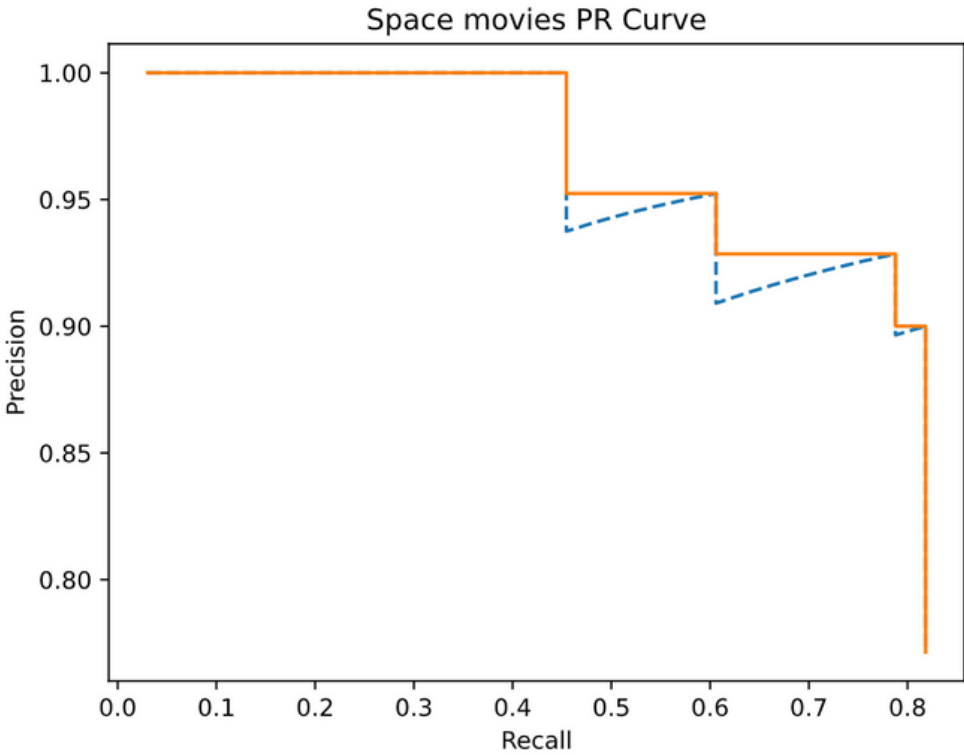
Metric	Normal	Signal	LTR
Average Precision	0.826686	0.816334	0.760389
Average Precision at 10	0.885714	0.885714	0.885714
Precision at 10	0.7	0.7	0.7
Precision at 15	0.7(3)	0.7(3)	0.(6)
Individual Assessment	RRRRNRNRNR	RRRRNRNNR R	RRRRNRNNRR



Results

Space Movies

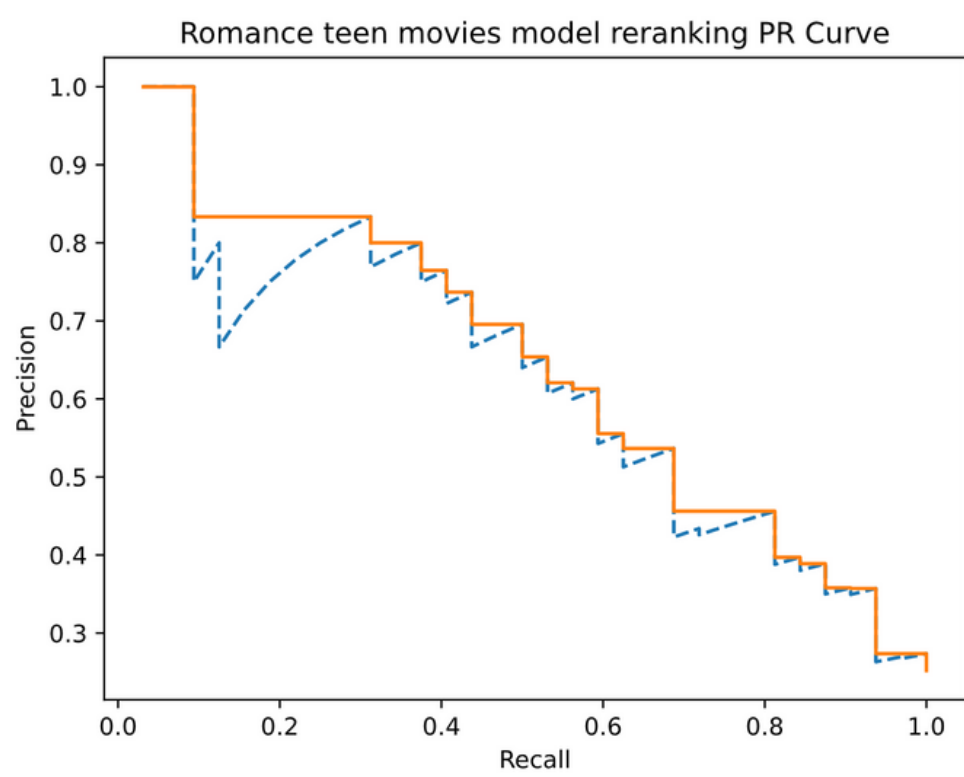
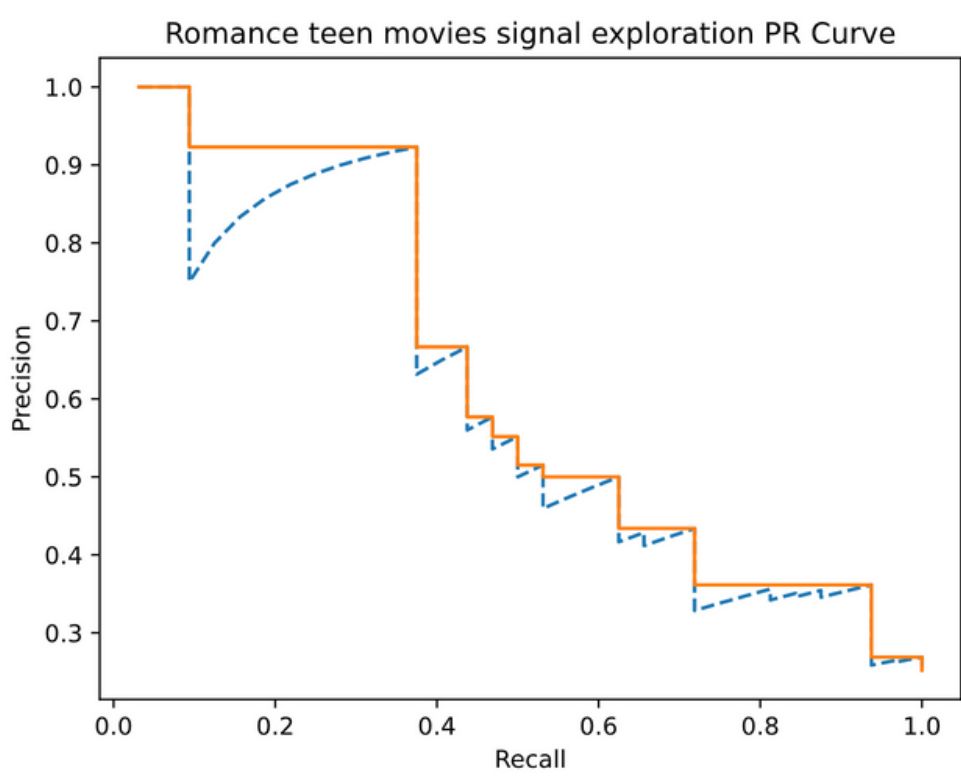
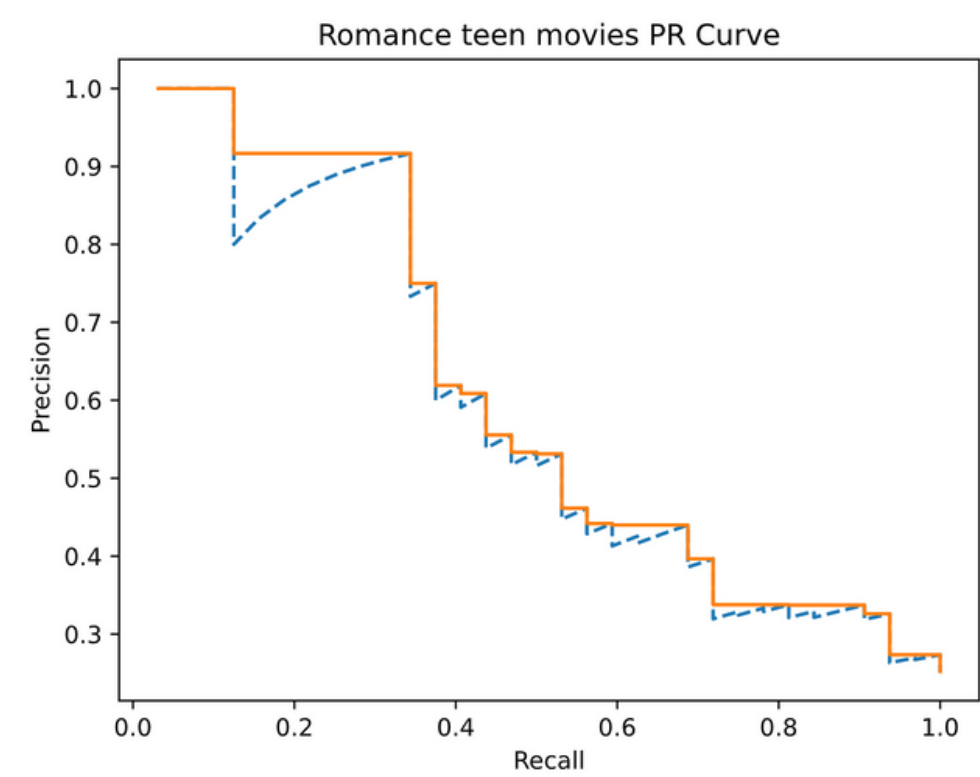
Metric	Normal	Signal	LTR
Average Precision	0.968987	0.961395	0.929099
Average Precision at 10	1.0	1.0	0.928263
Precision at 10	1.0	1.0	0.9
Precision at 15	1.0	0.9(3)	0.9(3)
Individual Assessment	RRRRRRRRRR	RRRRRRRRRR	RRRRNRRRRR



Results

Romance Teen Movies

Metric	Normal	Signal	LTR
Average Precision	0.601152	0.612675	0.633749
Average Precision at 10	0.928263	0.906041	0.855258
Precision at 10	0.9	0.9	0.8
Precision at 15	0.7(3)	0.8	0.8
Individual Assessment	RRRRNRRRRR	RRRNRRRRRR	RRRNRRRRRR



Any questions?

