Information Visualization Project

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Visualization Goal

Goal

Offer a recommender system as an interactive visualization.

Questions?

- Which are the best ranked movies in the data set?
- Which movies, that I like, are in the list?
- Which movies are in the list that I might like?

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Visualization Goal

Which are the best ranked movies in the data set?

- Positioning the best film in the middle;
- Making the size of the poster proportional to the score of the movie.

Visualization Goal

Which movies, that I like, are in the list?

Visualizing the poster of each movie. In this way it is simple to recognize the movies that I watched.

Visualization Goal

Which movies are in the list that I might like?

- Using a similarity matrix between movies;
- Developing an algorithm that spreads the movies by taking into account the similarity matrix

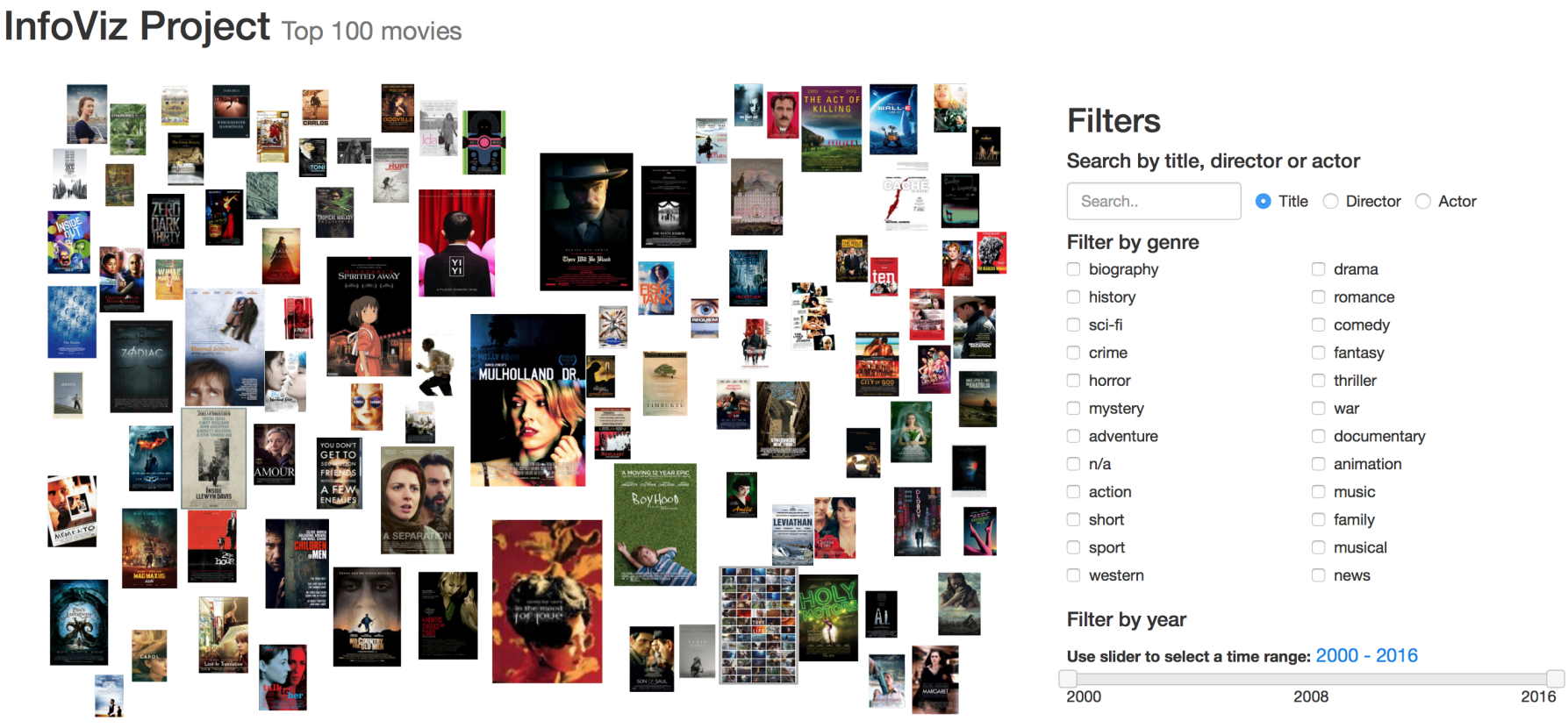
Design Space

The Visual Information-Seeking Mantra [Shneiderman, 1996]

- Overview first,
- Zoom and filter,
- Details-on-demand.

Variable	D	F	D'	X	Y	Z	T	R	-	[]	CP
Poster	QL							IM			
Rank	Q							S			
Similarity	Q			P	P						
Year	Q	br>									
Title	O	box>									
Actor	O	box>									
Actress	O	box>									
Director	O	box>									
Genre	N	br>									

The Visualization



Similarity Matrix

Formula

The distance between films is inversely proportional to similarity

$$S = \frac{1}{2}\left(\frac{|\text{common critics}|}{\max(|\text{list 1.}|, |\text{list 2.}|)} + \frac{|\text{common genres}|}{|\text{genres}|}\right)$$

Demo