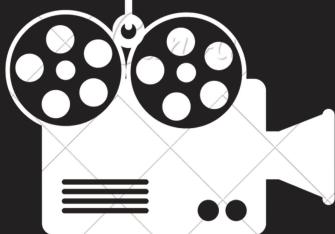




## Introduction

- Explore common design style of movie posters.
- Find out potential relation between movie content and poster with regard to composition, colour,
- The object of this study is movie posters, supplemented by their corresponding movie information

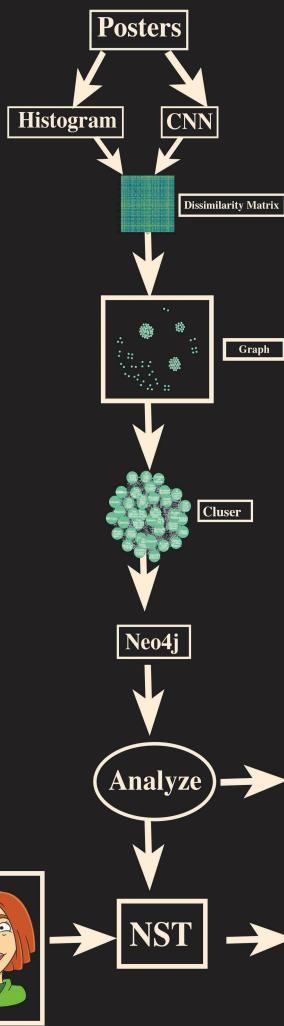


## Methods adopted

- Two methods are combined to calculate the dissimilarity between two images: calculation based on histogram and convolutional neural network.
- A few different community detection algorithms(Greedy Modularity, Asyn Lpa, Girvan Newman, K Clique, etc) are implemented.
- Neural Style Transfer algorithm is used to generate new posters according to style posters.



## Workflow



POPCORN

CINEMA



## Results



Posters of the same genre, series, period of producing time share common design style.

After analyzing the most representative posters of a certain theme, new poster can be generated with the help of Neural Style Transfer algorithm.

