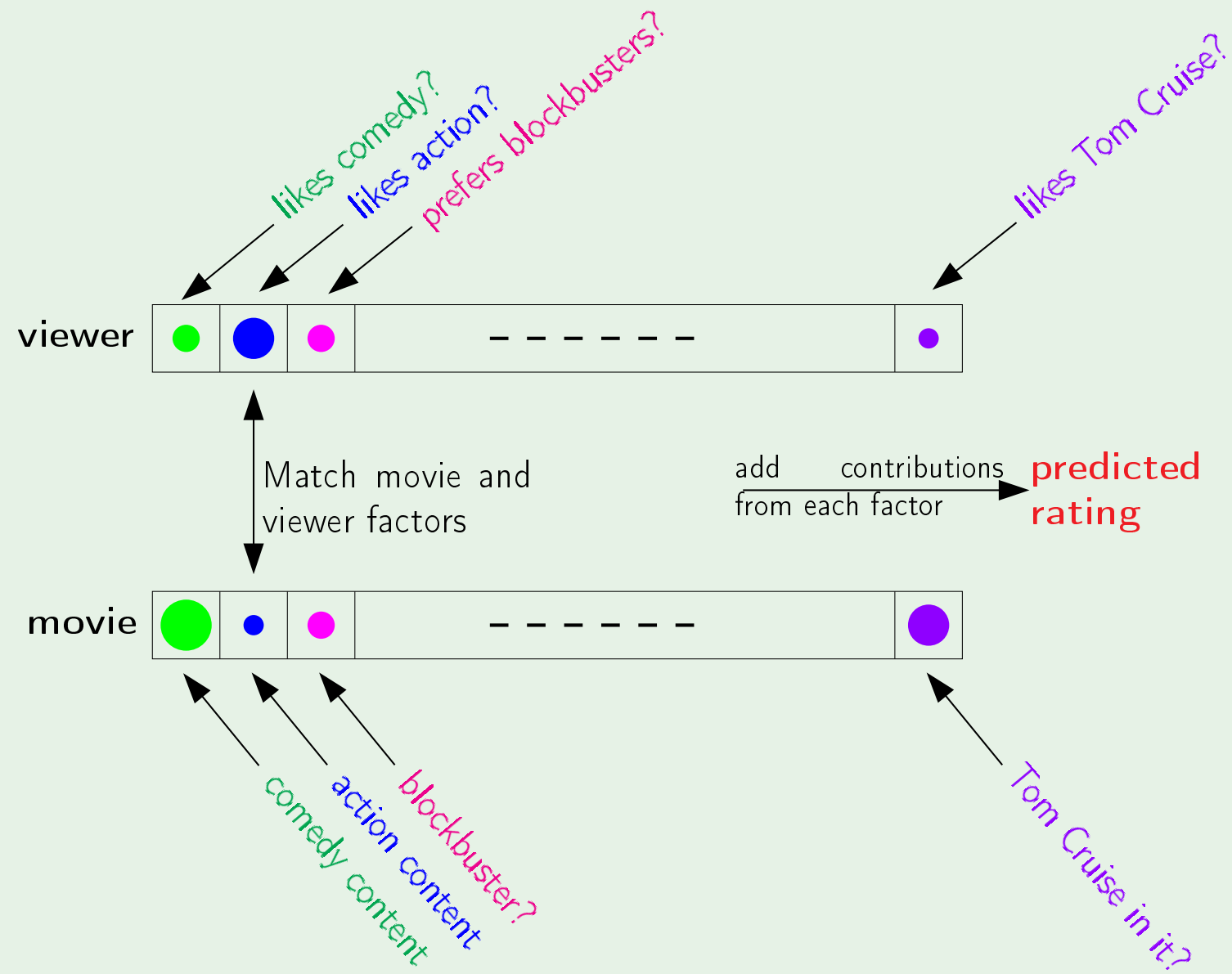# **Example:** Predicting how a viewer will rate a movie

10% improvement = **1 million dollar prize**

The essence of machine learning:

- A pattern exists.

- We cannot pin it down mathematically.

- We have data on it.

Movie rating – a solution

viewer

likes comedy?
likes action?
prefers blockbusters?
likes Tom Cruise?

Match movie and viewer factors

add contributions from each factor → **predicted rating**

movie

comedy content
action content
blockbuster?
Tom Cruise in it?

The learning approach