

HIT Instructions

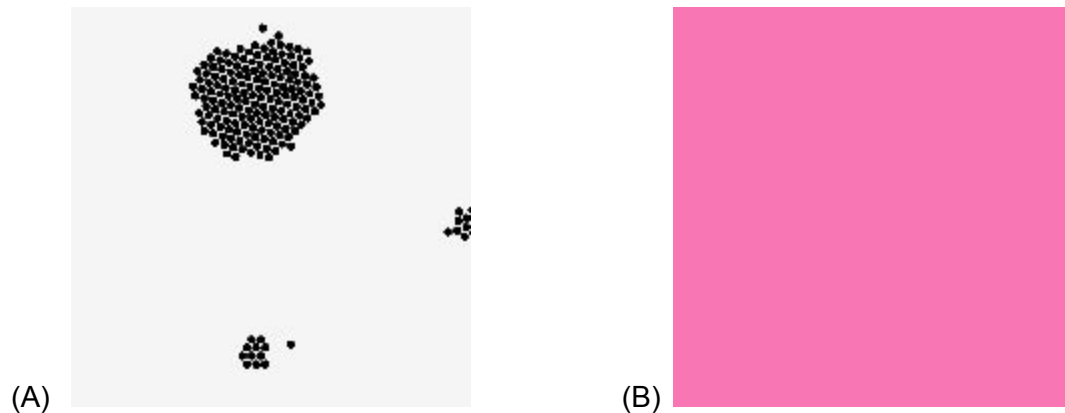
We expect this task to take 30 minutes (\$2.31). To be accepted, please:

1. read the story completely
2. then proceed to answer questions thoughtfully

The story has 3 parts to focus on:

- text (left column)
- visualizations (right column)
- animated transitions (right column)

An animated transition is like a movie showing change between two visualization states, such as movement of points (A) or colors changing on an item (B). See examples in the links below.



Please read the following story to comprehend the content of the text, visuals, and animated transitions: ([link](#))

(screening protocols: small or excessively large screen sizes, participants who have seen the story before, and participants who try to revisit the study by using cookies. once a participant completed the study, they were also tagged so that they could not participate and read the story again)

Before you finish reading the story, you must answer the question in color at the top. Please answer if you have seen this story before, then click the “Submit” button. Then read the story completely. At the end, there is a button to continue on to the questions. Please do not refresh the page or you will be unable to complete the task. Please answer honestly and thoughtfully.

After you submit the questionnaire, you will receive a completion ID. Please copy and paste that ID below - this is critical for acceptance of this task!

Thank you for your time!

Captcha Questions: (shown after reading)

Which visualization did not appear in the story?
(example visualizations from the story, except one)

What is this story about?
computer graphics, signal processing, **machine learning**, mathematics, biology

There were two cities mentioned in this story: New York and _____.
Paris, Chicago, London, Beijing, **San Francisco**

Comprehension Questions: (used in the questionnaire)

- 1. What is one of the best ways to discern between homes in two locations in the story?
bathrooms, square footage, year built, **elevation**, price, price per sq foot, # bedrooms
- 2. What is the method for making predictions shown in this story?
influence diagram, morphological analysis, random forest, **decision tree**, markov chain
- 3. What is the first dataset you run through this method called?
beginner, test, teaching, **training**, guidance
- 4. When does overfitting occur?
 - not enough data to accurately perform the method
 - patterns are identified through finding boundaries
 - when predictions are made
 - **boundaries with distinctions that don't make a difference**
 - a boundary which distinguishes between a large portion of the dataset
- 5. Imagine a scenario where you are performing a similar technique to study someone's favorite types of music. this tool would support finding new artists and albums based on your past interests and favorite music items. let's say you love all kinds of rock music and select your top 5 artists along with 5 artists you dislike, both categorized by how loud the music is. based on this split point, the tool reports 10 new kinds of artists that you may like, only 8 of which are actually rock bands, so 2 of those artists are not ideal. what do we call those 2 artists?
true positive, true negative, **false positive**, false negative, neutral