STUDY – SUPPLEMENTS

INTERFACE

INTRODUCTION

Supervision Study

Introduction

Hi, before we start, please note that you can only take part in this user study if you have **normal color vision**. Otherwise, we would ask you to return the HIT.

In this study, you will have to estimate a machine model's accuracy and answer a few questions at the beginning and end. You will have to complete **8 tests**, all of which have the same instructions. Try to work as quickly. Although you do not have a strict time limit, we suggest not working longer than **60 seconds** on each test. We will provide you with a timer.

The first test is a tutorial where you can read a detailed explanation of your task and explore the user interface.

If you are ready, please proceed.

Start

DEMOGRAPHICS

Supervision Study

Demographic Questions

Before we start, please answer the questions below.

Worker ID

Age

Gender

Make a selection

How familiar are you with data visualization?

Make a selection

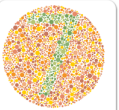How familiar are you with machine learning?

Make a selection

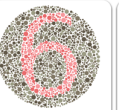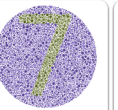Select the number shown in the image:

Next

MNIST – TUTORIAL

Legend
0
1
6
8

0:04

Controls

The plot on the left shows a variety of images. You can use your mouse-wheel to zoom in for more details. You can also hold down your left mouse key to move around.

Task

The images you are shown belong each to exactly one of four categories. The color around each image indicates to which of these categories the image belongs, according to the predictions of a computer model. Please look at the legend provided on the left to understand the assignment of colors to categories.
Your task is to look at different kinds of datasets and estimate how precise the computer model was. Try to work quickly.
Your estimate should be on a scale from 0% to 100%, with 0% meaning no image was assigned the right category and 100% meaning all images were assigned correctly.

For this first training task we will provide you with feedback on how precise your choice was.

Estimate the amount (in percent) of correctly marked images.

0%
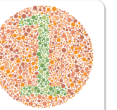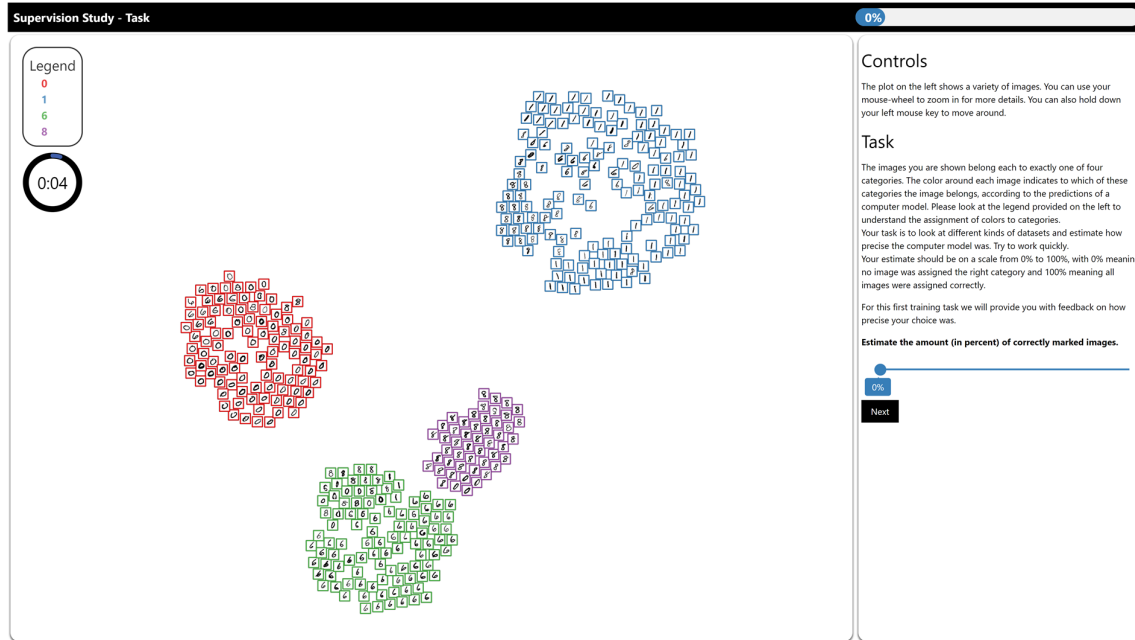
Next

Test-Setting: Feature-Strength-High, Supervised

TASK DESCRIPTION

CONTROLS

The plot on the left shows a variety of images. You can use your mouse-wheel to zoom in for more details. You can also hold down your left mouse key to move around.

TASK

The images you are shown belong each to exactly one of four categories. The color around each image indicates to which of these categories the image belongs, according to the predictions of a computer model. Please look at the legend provided on the left to understand the assignment of colors to categories.
Your task is to look at different kinds of datasets and estimate how precise the computer model was. Try to work quickly.
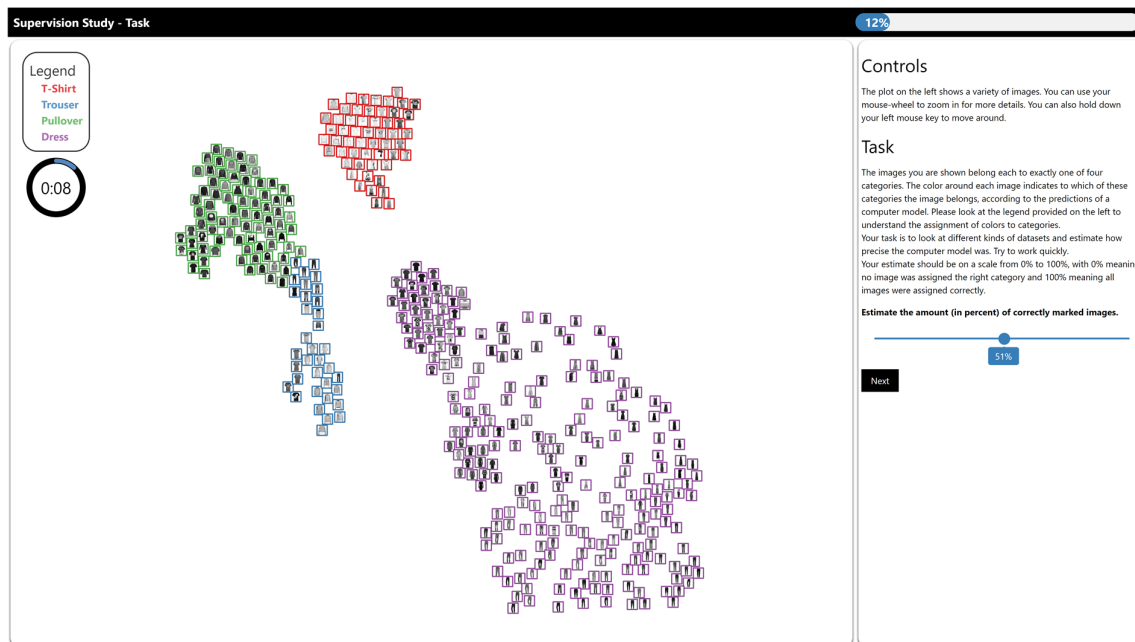Your estimate should be on a scale from 0% to 100%, with 0% meaning no image was assigned the right category and 100% meaning all images were assigned correctly.

For this first training task we will provide you with feedback on how precise your choice was.

Estimate the amount (in percent) of correctly marked images.

FMNIST

12%

Legend
T-Shirt
Trouser
Pullover
Dress

0:08

Controls

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Task

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Your task is to look at different kinds of datasets and estimate how precise the computer model was. Try to work quickly.
Your estimate should be on a scale from 0% to 100%, with 0% meaning no image was assigned the right category and 100% meaning all images were assigned correctly.

Estimate the amount (in percent) of correctly marked images.

51%

Next

Test-Setting: Feature-Strength-High, Supervised

Task Description

Controls

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Task

The images you are shown belong each to exactly one of four categories. The color around each image indicates to which of these categories the image belongs, according to the predictions of a computer model. Please look at the legend provided on the left to understand the assignment of colors to categories.
Your task is to look at different kinds of datasets and estimate how precise the computer model was. Try to work quickly.
Your estimate should be on a scale from 0% to 100%, with 0% meaning no image was assigned the right category and 100% meaning all images were assigned correctly.

Estimate the amount (in percent) of correctly marked images.
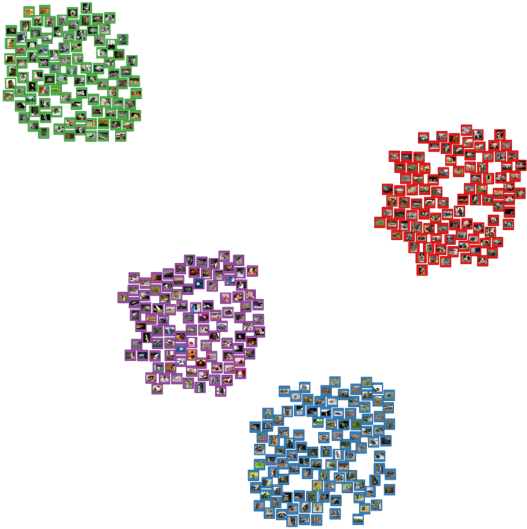
AWA

38%

Legend
Pig
Racoon
Cat
Rat

0:04

Controls

The plot on the left shows a variety of images. You can use your mouse-wheel to zoom in for more details. You can also hold down your left mouse key to move around.

Task

The images you are shown belong each to exactly one of four categories. The color around each image indicates to which of these categories the image belongs, according to the predictions of a computer model. Please look at the legend provided on the left to understand the assignment of colors to categories.
Your task is to look at different kinds of datasets and estimate how precise the computer model was. Try to work quickly.
Your estimate should be on a scale from 0% to 100%, with 0% meaning no image was assigned the right category and 100% meaning all images were assigned correctly.

Estimate the amount (in percent) of correctly marked images.

0%

Next

Test-Setting: Feature-Strength-High, Supervised

ATTENTION TASK – MNIST

Legend
0
1
6
8

0:05

Controls

The plot on the left shows a variety of images. You can use your mouse-wheel to zoom in for more details. You can also hold down your left mouse key to move around.

Task

The images you are shown belong each to exactly one of four categories. The color around each image indicates to which of these categories the image belongs, according to the predictions of a computer model. Please look at the legend provided on the left to understand the assignment of colors to categories.
Your task is to look at different kinds of datasets and estimate how precise the computer model was. Try to work quickly.
Your estimate should be on a scale from 0% to 100%, with 0% meaning no image was assigned the right category and 100% meaning all images were assigned correctly.

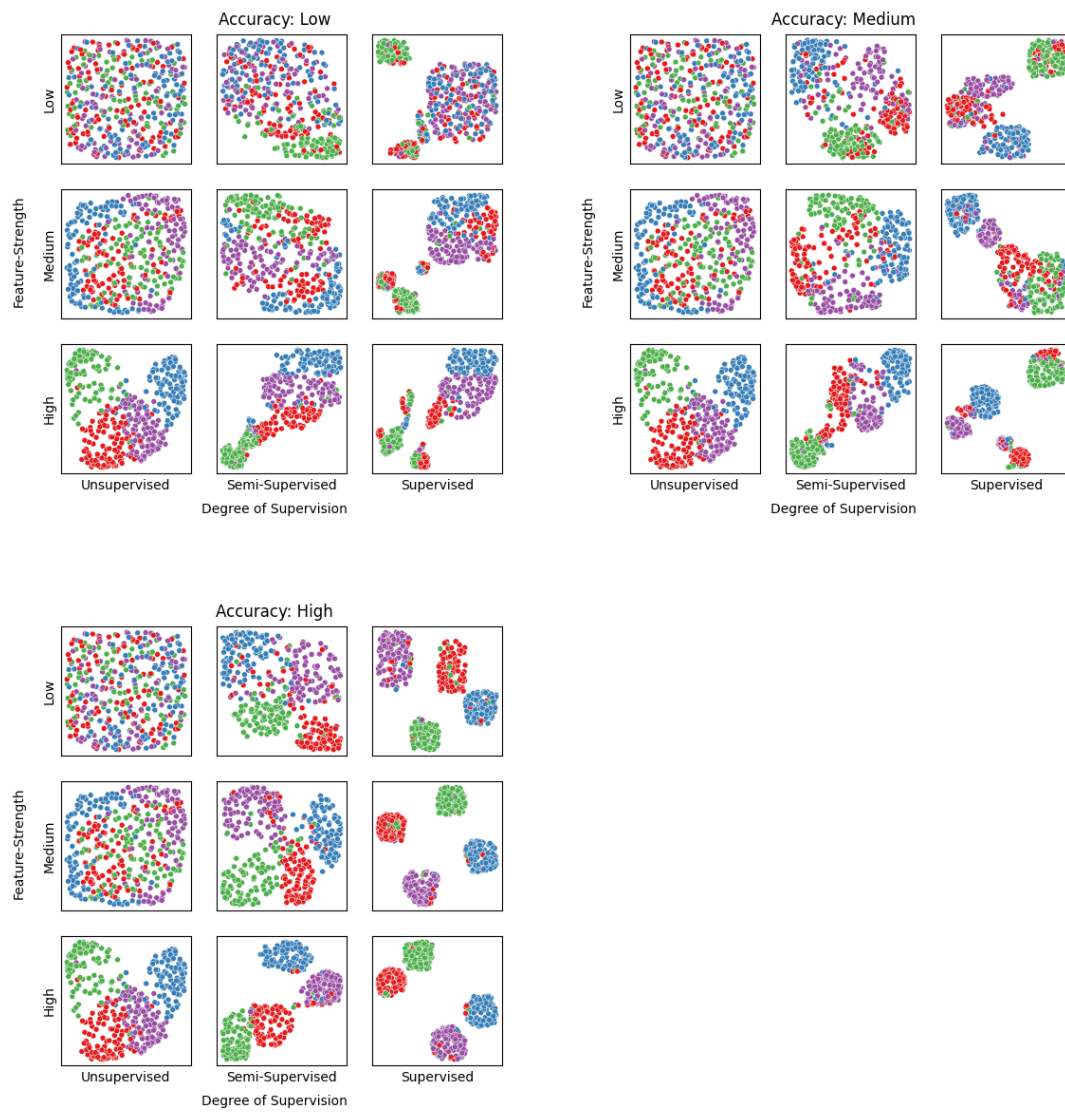**Estimate the amount (in percent) of correctly marked images.**
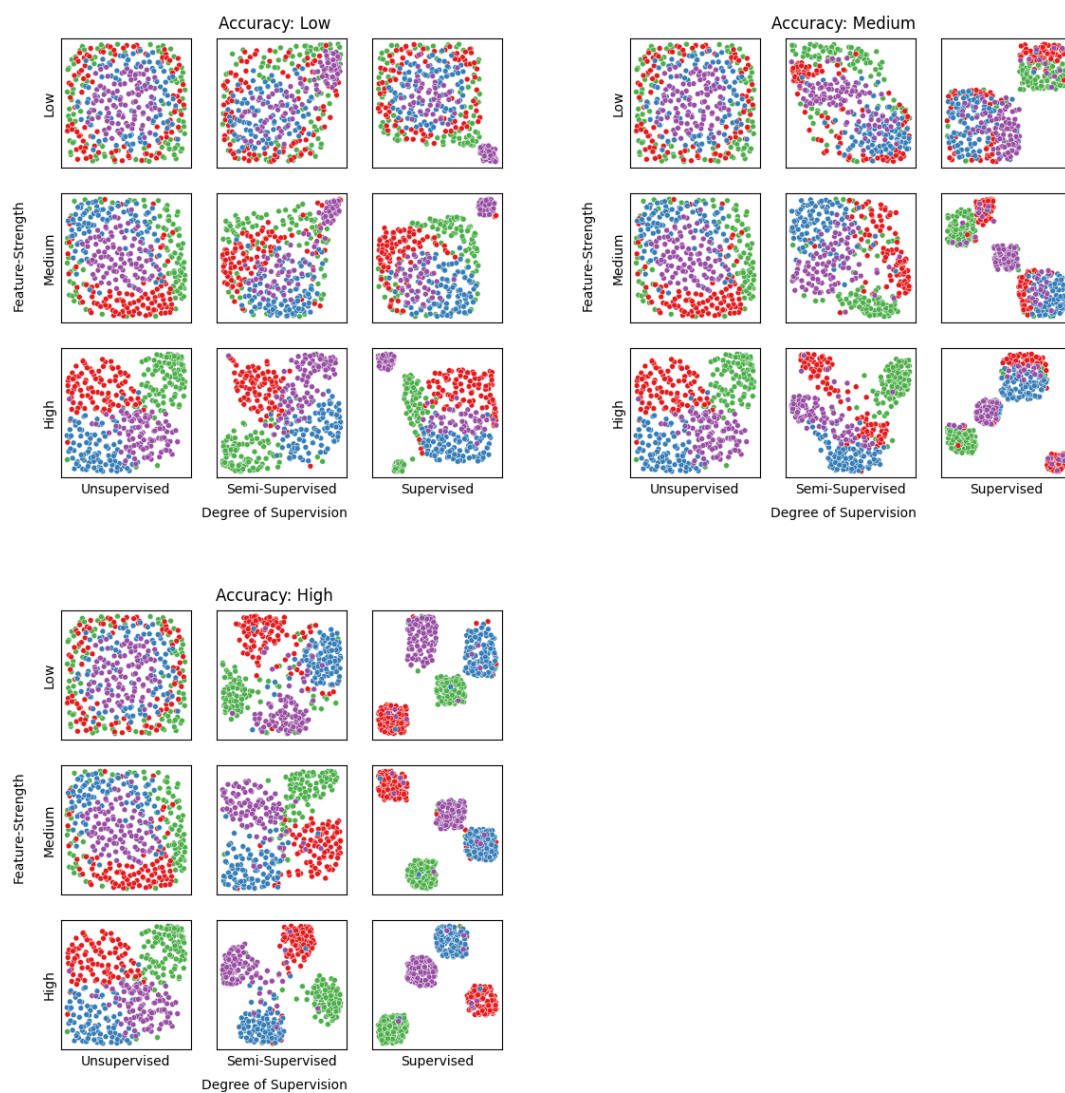
0%

Next

Test-Setting: Feature-Strength-High, Supervised

TEST CONDITIONS

FMNIST

Shown colors represent GT labels.

AWA

Accuracy: Low

Accuracy: Medium

Accuracy: High

Shown colors represent GT labels.