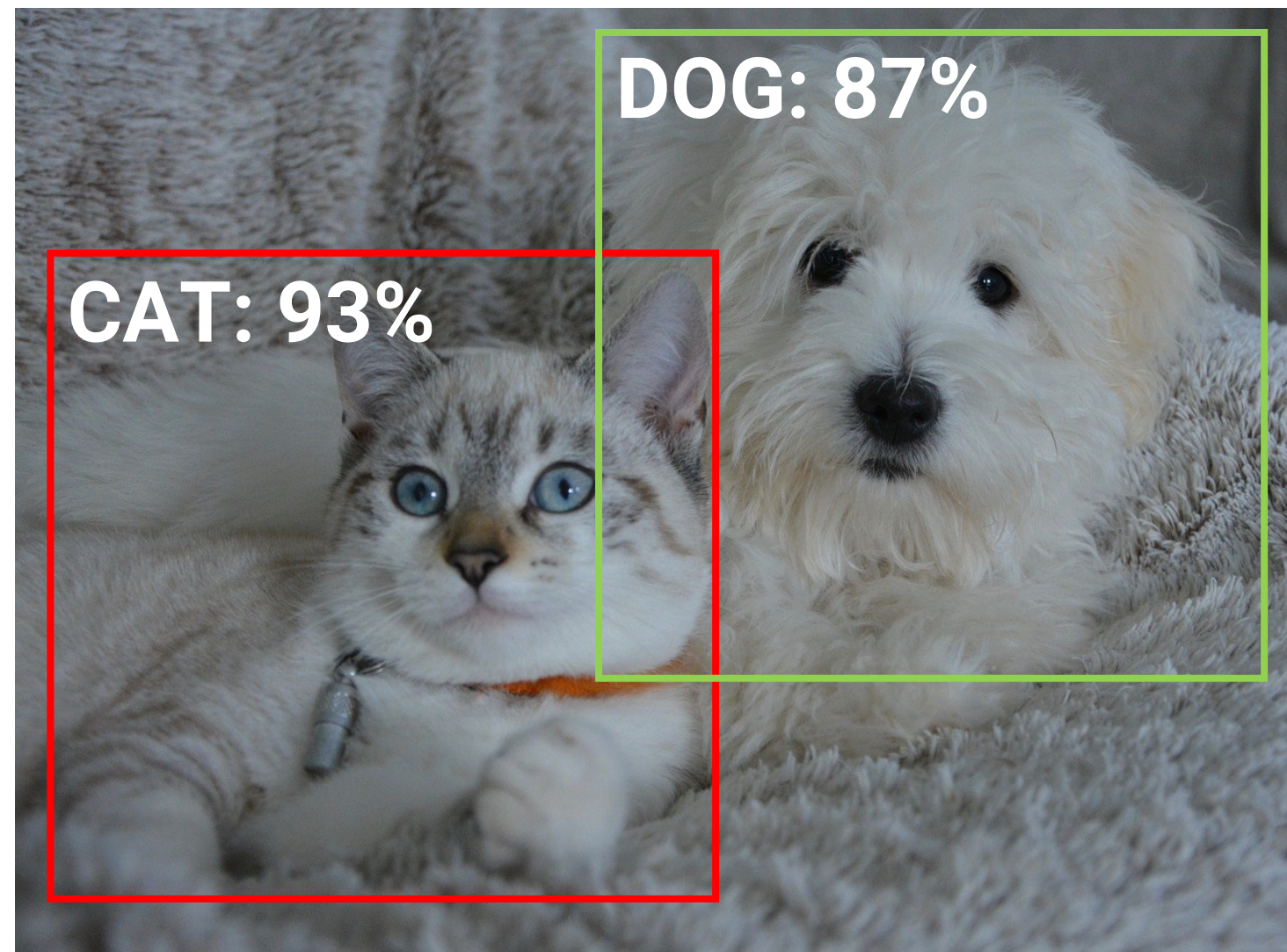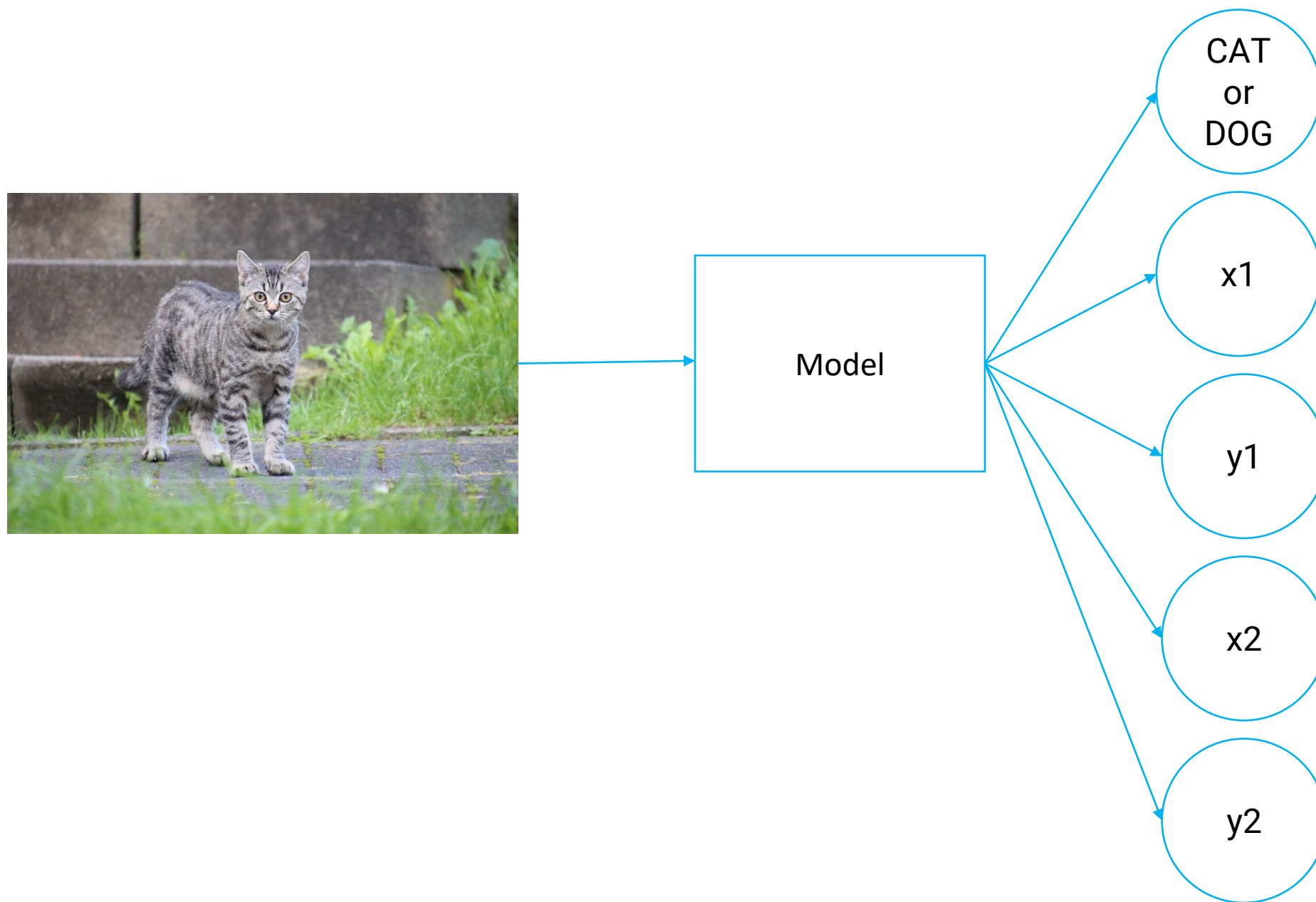# Object Detection

Dr. Alireza Aghamohammadi

- The aim of object detection is to pinpoint the presence and location of multiple objects in a given image.

- Problem Setting:
    - Input: An image in RGB format
    - Output: A collection of 2D bounding boxes, each associated with a category label and a confidence score
- The number of objects and their respective sizes within the image are not known priori.

- How do we approach the problem if we only have a single object?

- How do we approach it if we have multiple objects? That's the content of the following videos.