

# Object Detection

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**Abstract:** *Target identification, one of the most important functions in machine learning, has been a research hotspot for the last 20 years and is widely used. Its goal is to quickly and accurately detect and reveal a huge number of elements in a given image that correspond to specific categories. Based on the model learning approach, the algorithms are classified into two types: single-stage detection algorithms and two-stage detection algorithms. The standard algorithms for each level are then described in this work. Following that, numerous sample methodologies are reviewed and contrasted in this domain, as are open and special datasets often used in target identification. Finally, challenges that may emerge while identifying targets are discussed.*

**Keywords:** Neural Networks, Object Detections, CNN, SPP, YOLO, mAP, R-CNN, recogniseds

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## BIOGRAPHY



My name is Ritvik Bhadola residing in New Delhi. Currently pursuing my B.Tech from Dronacharya College of Engineering and working as Machine learning intern in Think Future Technologies. Presently I am assigned in the field of object detection which led me to the curiosity about how object detection evolved which led me to this research paper.