

ABSTRACT

Efficient and accurate object detection has been an important topic in the advancement of computer vision systems. With the advent of deep learning techniques, the accuracy for object detection has increased drastically. The project aims to incorporate state-of-the-art technique for object detection with the goal of achieving high accuracy with a real-time performance. A major challenge in many of the object detection systems is the dependency on other computer vision techniques for helping the deep learning based approach, which leads to slow and non-optimal performance. In this project, we use a completely deep learning based approach to solve the problem of object detection in an end-to-end fashion. The network is trained on the most challenging publicly available dataset (PASCAL VOC), on which object detection challenge is conducted annually. The resulting system is fast and accurate, thus aiding those applications which require object detection.

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ABBREVATIONS

GUI	Graphical User Interface
PY	Python
OPP	Object Oriented Programming
PIP	Package Installer for Python