Public Abstract First Name:Miao Middle Name: Last Name:Sun Adviser's First Name:Tony Xu Adviser's Last Name:Han Co-Adviser's First Name: Co-Adviser's Last Name: Graduation Term:SP 2014 Department:Electrical Engineering Degree:MS Title:AN IMAGE-CLASSIFICATION LEVERAGED OBJECT DETECTOR

Currently, the state-of-the-art image classification algorithms outperform the best available object detector by a big margin in terms of average precision. We therefore propose a simple yet principled approach to leverage object detection through image classification on supporting regions specified by a preliminary object detector. Using a simple bag-of-words model based image classification algorithm, we leverage the performance of the deformable model objector by 5% in average precision, leading to a best known results on the standard PASCAL 2007 dataset.