

## **Abstract**

**The use of gloves by laboratory workers has become mandatory in laboratory work intending to maintain the safety of workers from the spread or side effects carried out in the laboratory, but there are still workers who violate the rules by not using gloves when workers are in the laboratory room. This study aims to detect the use of gloves by laboratory workers. The method used in this research is You Only Look Once (YOLO) version 4. YOLOv4 has a system that can complete computer visual tasks in detecting and detecting objects quickly in real time. Based on the results of experiments and testing conducted, the model gets an Average IoU of 55.56%.**

**Keyword: *Detection, Yolov4, Laboratory, Hyperparameter, IoU***