

Individual Contribution [JiaHao Yao 91945818]

For this project I have done my own research on object detection, so I can transform the idea into a hand detection. The paper that benefited me the most is Faster R-CNN: Towards Real-Time Object Detection with Region Proposal Networks by Shaoqing Ren, Kaiming He, Ross Girshick, and Jian Sun. It's useful because they deconstruct the faster rcnn and explain each component.

After that my team and I meet up and we discuss about which models we want to try and use. I propose the faster rcnn and ssd to see if we can increase speed on faster rcnn and accuracy on ssd. I use the tensorflow object detection API to build the model for both and train them using google cloud GPUs. Wrote the `real_time_hand.py` for internal camera to detect hand with Ling Jin. On evaluation I help with getting new data for the model to test on and evaluate over accuracy rate.