

Appendix A. Anytime Detection

The NAS-FPN architecture has the potential to output detections at any intermediate pyramid network. We designed the experiments to compare NAS-FPN models with and without anytime detection. We train and evaluate NAS-FPN with varying number of stacked pyramid layers as the baseline and compare the performances to model trained with deep supervision and generate detections with early exit. In Figure 11, the performance of anytime detection models is close to the baseline model, showing the evidence that NAS-FPN can be used for anytime detection.

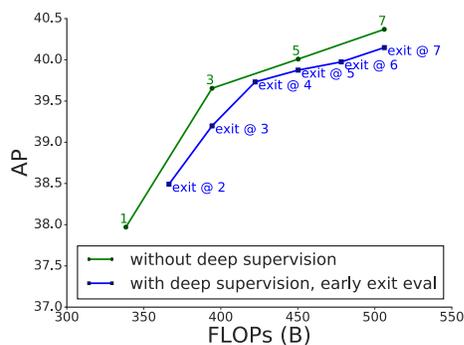


Figure 11: Performance of model trained with and without deep supervision using R-50 @ 384 NAS-FPN. The model trained with deep supervision and tested with anytime detection has similar accuracy compared to model without deep supervision.