

Net	Pros	Cons
FCN 32s- scratch		The mask has not a good definition because there is not enough information in the sampling [1].
FCN 32s- vgg	The pretrained weights produces a better convergence	The mask has not a good definition.
FCN 16s -32	The convergence is faster than the model with vgg weights, the mask has better definition that the other models.	
FCN 16s- vgg	The mask has a good definition and the convergence is faster than the scratch models.	The convergence is slowest that FCN 16s - 32.
FCN 16 -scratch	The mask presents a better definition because the models 16s use the information of lower layers [1].	The convergence is slowest because there is not using of pretrained weights.

In the table is summarized the results of the different nets. The best model is FCN 16s – 32 due to the 16s models use the information of lower layers to obtain a better result in the final layer

[1]. In addition, the use of pretrained weights improves the speed of convergence in the models. Therefore, the models with a faster convergence show better performances [1].

[1] Long, J., Shelhamer, E., & Darrell, T. (2015). Fully convolutional networks for semantic segmentation. In *Proceedings of the IEEE conference on computer vision and pattern recognition* (pp. 3431-3440).

Annexes



Figure 1. FCN 16s-scratch