Machine Learning and Object Recognition

Quiz 11/1/2018

Please write all you answers clearly so we can actually read them ;-)

First and last name:

Question 1: Multi-Path Refinement Networks

(1.a) How and why is a pre-trained ResNet architecture for image classification adapted in this paper for semantic segmentation (do not go into detail of the RefineNet blocks) ?

(1.b) Briefly describe the function and working of the RefineNet blocks.

Question 2: Flownet 2.0: Evolution of optical flow estimation with deep networks

(2.a) Describe the approach to stack multiple networks to improve the flow estimation, what are the inputs to the second network in the stack?

(2.b) Why is overfitting a potential issue when stacking multiple networks, and how is this prevented?