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(57) Abstract :
[034] The present invention discloses a deep learning based image processing in computed tomography angiography with machine learning interfaces and method thereof. The system includes, but not limited to, a memory which stores instructions; one or more processors attached to the memory wherein the one or more processors, when executing the instructions which are stored, are configured to: a deep learning based interface for obtaining a source domain medical picture; synthesising the target domain medical image using a trained contextual deep network to predict the intensities of voxels in the target domain medical image based on the intensities and contextual information of voxels in the source domain medical image. Further, using a CT scanner to record a layer of a body; basing a source domain medical picture, which is a first CT picture on Hounsfield values (HU values) derived for the layer of the body recorded and defining at least one organ-specific HU region, assigning a HU-dependent transfer function to the organ-specific HU region. Accompanied Drawing [FIGS. 1-2]

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