GAN-based sinogram inpainting for metal artifact reduction in dental cone-beam CT

Taigyntuya Bayaraa

1) Department of Computational Science and Engineering, Yonsei University, Seoul 03722, KOREA

ABSTRACT

We proposed generative adversarial network based sinogram inpainting method to deal with some metal related artifacts in dental cone-beam CT. Existing MAR methods which are implemented for a 2D slice such as a sinogram may not be effective for CBCT projection data due to the lack of information. To overcome this issue, our method was modeled to use a additional z-axis context information of cone-beam projection to inpaint metal trace in sinogram.