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(57) Abstract :

System and method for improving image reconstruction of an MRI (104) comprising a processor (202) that executes a plurality of modules (208) further comprising an acquisition module (210), to send an optimized sequence setting for accelerating an image scan acquisition from the MRI (104) and receive a scan format, an anonymized image scan pertaining to a patient. The anonymized image scan is acquired by under sampling in K space of the MRI (104) using the optimized sequence setting that is recommended based on a load factor. An AI engine module (212), to predict a high frequency image scan from the anonymized image scan in image domain using a deep learning algorithm and a reconstruction module (214), to reconstruct the high frequency image scan by adding at least one quality parameter using the deep learning algorithm, and a report module (216), to output the reconstructed high frequency image scan.

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