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(57) Abstract:

ABSTRACT SYSTEM AND APPROACH FOR PRIVACY PRESERVED CLASSIFICATION SYSTEM FOR MEDICAL IMAGE DIAGNOSIS A system and a method for using federated learning techniques for medical imaging are disclosed. The system comprises a plurality of client devices (102), a server (104); wherein each of the plurality of client devices and the server (104) are configured to store federated learning techniques, the server (104) transmits a deep learning model to the plurality of client devices (102), once federated learning techniques are enabled on the plurality of client devices and the server on initialization of federated learning medical image classification training process, each individual client device starts model training on available classified medical images, deep learning models are transmitted to the server (104) once image classification model gets trained on individual client devices to combine models in one average model for classification of medical images, and averaged medical image classification model are sent back to the all-connected clients for utilization at their end. [Figure 1]

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