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(71)Name of Applicant :

1)Chitkara University

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Chitkara Innovation Incubator Foundation

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Ms. Shagun Sharma

Address of Applicant :Chitkara University Research Innovation Network, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Dr. Kalpna Guleria

Address of Applicant :Chitkara University Research Innovation Network, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

(57) Abstract :

ABSTRACT PNEUMONIA DETECTION USING FEDERATED LEARNING TECHNIQUES A method for using federated learning techniques is disclosed. The method comprises providing an initial phase, wherein the initial phase involves collecting an open-source dataset to train the global model, distributing the global model to all clients in a framework, training, by the clients, the global model on their own non-IID datasets, which can vary due to different hardware, locations, and patients in real-life scenarios, creating updates in the form of performance or weight values and aggregating the models using one or more methods, and the updates are sent back to the initial phase to update the global model with averaged values. [Figure 1]

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