

Project

Applying Federated Learning with Blockchain (DEDOC)

Team Members

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Abstract

We are building a medical Application which helps doctor in taking decision with the help of recommendations given by our system. So basically, our system is designed with the two main pillars one with the help of blockchain technology to ensure security and making faster communication mode, second is Artificial Intelligence which takes decision on the basis of data without actually compromising privacy of Data

Summary

So, Our System will have a null model. Null Model will be sent to the multiple hospitals. We ensure that these hospitals must be eligible for participation in training model via Smart Contracts. These models will download the null model. These Null models will be trained on the hospitals systems using hospitals resources. So, we are not compromising any Security and confidentiality of patients record when the model is trained on the data. Then the trained model only sends back to our main server where we will aggregate all the collected models on our main server to generate the super model. Then Super model will again send back to the hospitals who are participating in the program.

Our trained model will help the doctors in taking decision by taking condition of patient as a parameter and giving its prediction on the diagnosis of the patient

Application

- 1) System can be use by the novice doctors
- 2) Our system will be extremely useful in the times of natural calamities where there is lack of doctors & experts our system will recommend Doctor to treat on the basis of patient's condition