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Thème

A federated learning architecture for prescription text recognition in a Blockchain environment

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Abstract

An **Electronic Health Record** (EHR) is the digital representation of patients medical history, including information such as their past illnesses, their medical imaging history and prescriptions. Because of doctor's incomprehensible handwriting, trying to understand prescriptions may be difficult and lead to harmful consequences for the patients. That's why, we proposed an artificial intelligence-based framework for the recognition of handwritten prescriptions' text. Our framework will not only provide high-accuracy recognition, but will also guarantee the preservation of patients privacy thanks to combining well-known technologies like blockchain and federated-learning.

Keywords: **Blockchain, Deep Learning, Federated Learning, EHR**