“PREPREDICT”

NON-INVASIVE MACHINE LEARNING TECHNIQUE TO PREDICT PRETERM LABOR

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Abstract

With the constant evolvement of Machine Learning Techniques, the usage of predictive models in clinical decision making has risen up. Though the complex machine learning models lead to reduction of the transparency of the model, AI has branched out to explain the AI models. These explainability techniques have enabled complex machine learning models to be used in clinical decision making processes.

Every year around 1.1 million of infants die due to complications that occur during preterm birth. Therefore it is vital to identify preterm labor beforehand to treat it better. Not only does it affect the infant mortality and healthiness, it also affects maternal mortality. “PrePredict” is system made out of the sole intention of assisting the manual process of identification of preterm labor or preterm birth to enable the possibility of a healthy population.

Key words : Machine Learning, Explainability AI, Convolutional Neural Network