PROJECT REPORT

CLASSIFICATION OF MATERNAL HEALTH RISKS USING BOOSTING TECHNIQUE

CALEB ADITHIA KURNIAWAN
21.K1.0021

Faculty of Computer Science
Soegijapranata Catholic University
2024

ABSTRACT

Maternal health is an important concern as it directly impacts the ongoing survival and well-being of future generations. In many developing nations, maternal mortality has become a serious problem despite the advances in medical science. Recognizing potential risks in pregnancies is essential for the well-being of the mother and the newborn. In various clinical applications, including disease diagnosis, treatment planning, and patient monitoring, AI models are capable of showing promising results. Depending on the chance of complications during pregnancy, it can be categorized into three risk levels: low, and moderate. The risk is classified based on age, systolic and diastolic blood pressure, blood sugar, body temperature, and heart rate. This paper aims to apply several boosting techniques: Boosted Random Forest, XGboost, and Catboost to classify the maternal health risk. By classifying the maternal risk, it should help minimize the occurrence of maternal death which will lead to the continuation of humanity.

Keyword: classification, boosting, machine learning