## Deteksi Peyakit Diabetes Menggunakan Metode Logistic Regression

Rahmat Taufiq Akbar<sup>1</sup>, Dr. Irma Palupi. S.Si., M.Si. <sup>2</sup>, Isman Kurniawan, S.Pd., M.Si., M.Sc., Ph.D. <sup>3</sup>

Fakultas Informatika, Universitas Telkom, Bandung <sup>1</sup>rahmataufiqakbar@students.telkomuniversity.ac.id, <sup>2</sup>irmapalupi@telkomuniversity.ac.id, <sup>3</sup>ismankm@telkomuniversity.ac.id

## Abstract

Diabetes is a metabolic disease characterized by elevated blood glucose levels in the human body, either due to the inadequate production of the hormone insulin or ineffective response of cells to insulin. Risk factors for developing diabetes is an unhealthy lifestyle such as consuming too much food and drinks with high sugar content, lack of physical activity and other factors. Diabetes should be diagnosed by doctors who are competent in their fields, and this will take time. This study applied machine learning to build a classification model with the Logistic Regression classification method, which used a combination of two datasets, namely the dataset collected from "Stanford Hospital" and the dataset from "Gula Karya Medika". These datasets were combined by using the Gradient Boosting Regressor method to fill in the empty values in the dataset.

Keywords: Logistic Regression, Gradient Boosting Regressor, Diabetes,