



PROJECT REPORT
HEART ATTACK PREDICTION USING NEURAL
NETWORK AND RANDOM FOREST

RIO RIZKI RAHARDJO
16.K1.0054

Faculty of Computer Science
Soegijapranata Catholic University
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APPROVAL AND RATIFICATION PAGE



Judul Tugas Akhir : Heart Attack Prediction Using Neural Network And Random Forest
Diajukan oleh : Rio Rizki Rahardjo
NIM : 16.K1.0054
Tanggal disetujui : 22 Desember 2022
Telah setuju oleh
Pembimbing : R. Setiawan Aji Nugroho S.T., MCompIT., Ph.D
Penguji 1 : Yonathan Purbo Santosa S.Kom., M.Sc
Penguji 2 : Hironimus Leong S.Kom., M.Kom
Penguji 3 : R. Setiawan Aji Nugroho S.T., MCompIT., Ph.D
Penguji 4 : Rosita Herawati S.T., M.I.T.
Penguji 5 : Y.b. Dwi Setianto S.T., M.Cs.
Penguji 6 : Yulianto Tejo Putranto S.T., M.T.
Ketua Program Studi : Rosita Herawati S.T., M.I.T.
Dekan : Dr. Bernardinus Harnadi S.T., M.T.

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Name : RIO RIZKI RAHARDJO

ID : 16.K1.0054

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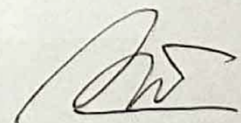
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Program Studi : Teknik Informatika
Fakultas : Ilmu Komputer
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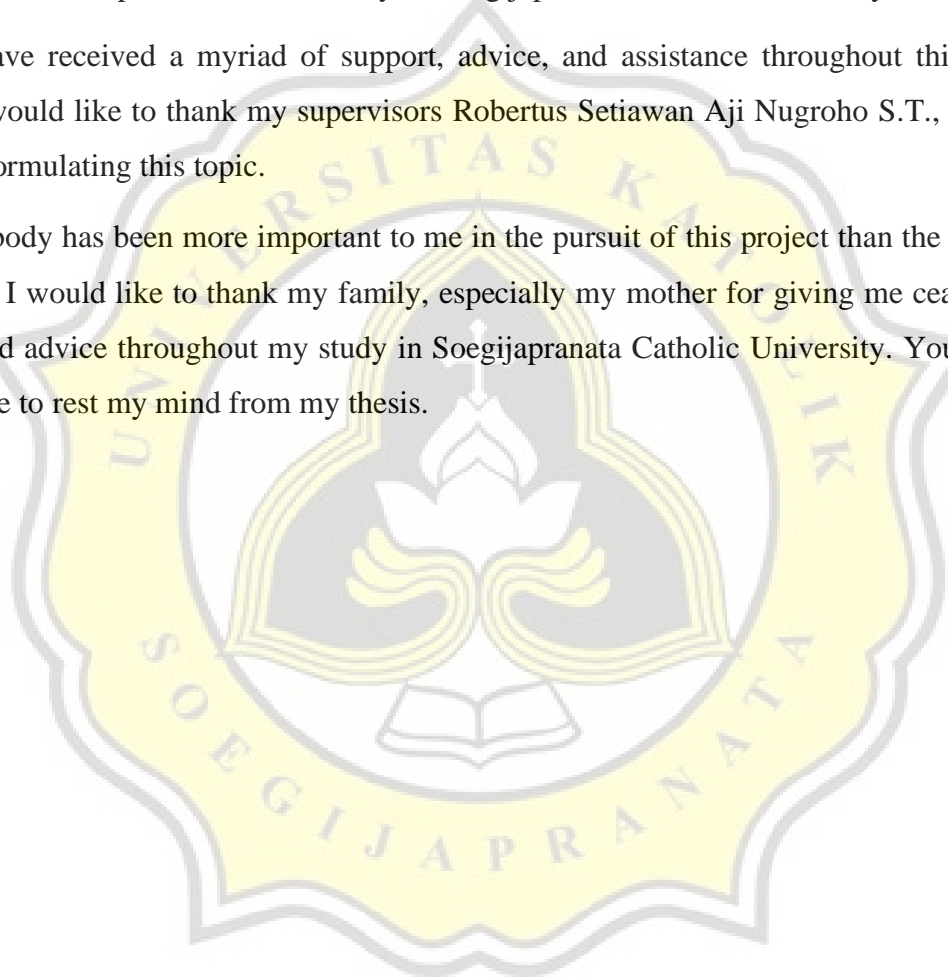
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ABSTRACT

In this project, I raise the issue of predicting someone will have a heart attack disease. Based on the 2014-2019 Global Burden of Disease and Institute for Health Metrics and Evaluation (IHME), heart disease is the highest cause of death in Indonesia. The 2013 and 2018 Basic Health Research (Riskesdas) data show an increasing trend of heart disease from 0.5% in 2013 to 1.5% in 2018. In fact, heart disease is the biggest cost burden. Based on BPJS Health data, in 2021 the largest health financing will be for heart disease of IDR 7.7 trillion. Heart disease is caused by unhealthy lifestyles, such as smoking and lack of physical activity, obesity, hypertension and diabetes mellitus. With this project, it is hoped that the detection of heart attacks in suspects/people in general can be known early. The process that will be carried out in this project to predict the presence of a heart attack is to use two classification algorithm methods, namely Neural Network and Random Forest. By using an existing dataset downloaded on the Kaggle site and implemented in the Orange Data mining program. I trained both algorithms with the downloaded dataset to test the accuracy of the prediction results. The final results of the training data for the two algorithms will be used to see the level of accuracy in the two algorithms with varying training data parameters. So that it can be concluded which algorithm is right to use for a lot or a little available data.

Keyword: Heart Attack, Neural Network, Random Forest, Orange, Prediction, Machine Learning

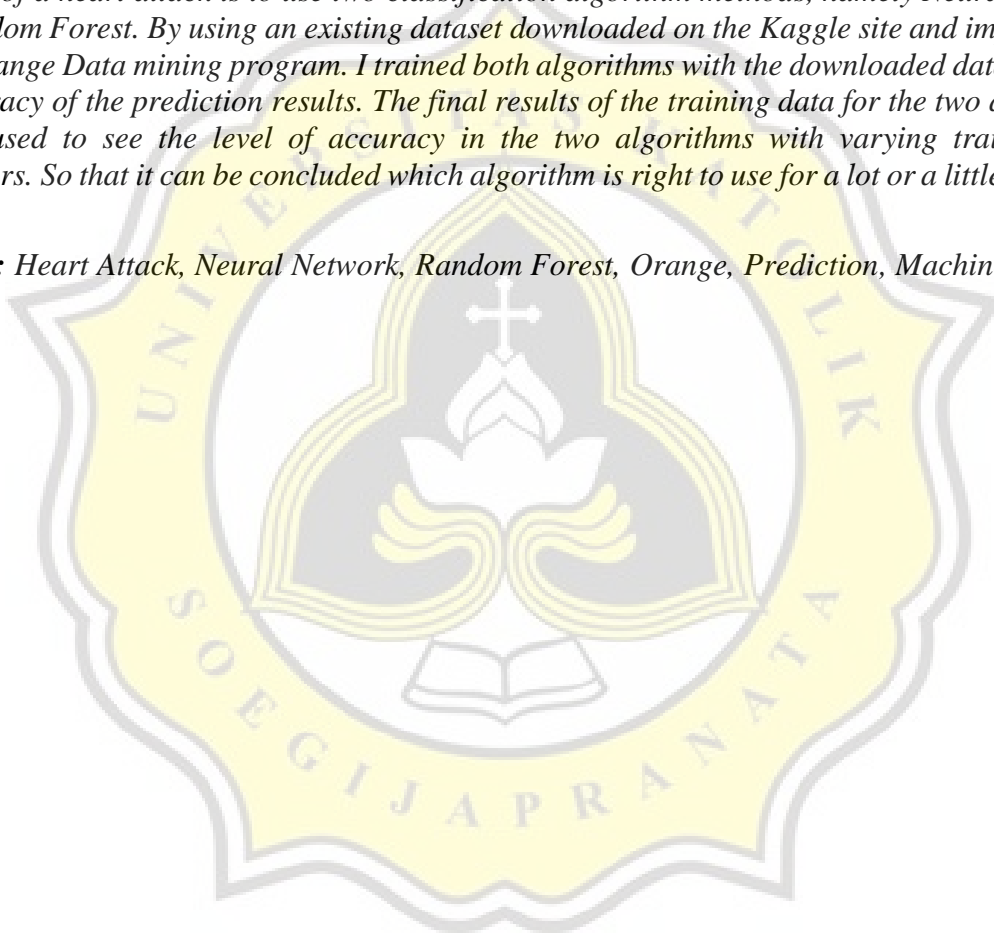


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