

ABSTRAK

Nama : Wida Azis Rahmat

Program Studi : Teknik Informatika

Judul : Perbandingan Algoritma Decision Tree, Random Forest dan Naive Bayes Pada Prediksi Penilaian Kepuasan Penumpang Maskapai Pesawat Menggunakan Dataset Kaggle

Machine learning berfokus pada pembangunan sistem untuk mempelajari dan meningkatkan kinerja berdasarkan data yang dimiliki. Setiap algoritma *machine learning* memiliki performa yang berbeda, dalam penelitian ini berfokus dalam mengukur performa tiga algoritma *machine learning* klasifikasi yaitu algoritma *decision tree*, algoritma *random forest* dan algoritma *naive bayes*. Menggunakan data kepuasan penumpang pesawat dari situs *kaggle*, pada penelitian ini akan dilakukan klasifikasi untuk memprediksi penilaian kepuasan penumpang, Metode *confusion matrix* digunakan dalam mengukur performa akurasi, pengukuran menghasilkan algoritma *random forest* memiliki akurasi paling tinggi sebesar 95%, algoritma *decision tree* sebesar 93% dan algoritma *naive bayes* memiliki akurasi paling rendah sebesar 82%.

Kata Kunci: *Machine Learning, Confusion Matrix, Decision Tree, Random Forest, Naive Bayes.*

ABSTRACT

Name : Wida Azis Rahmat

Study Program : Informatics Engineering

Title : Comparison of Decision Tree, Random Forest and Naive Bayes Algorithms on Airline Passenger Satisfaction Prediction Assessments Using Kaggle Dataset

Machine learning focuses on building systems to learn and improve performance based on the data they have. Each machine learning algorithm has a different performance. In this study, the focus is on measuring the performance of three classification machine learning algorithms, namely the decision tree algorithm, the random forest algorithm and the naive Bayes algorithm. Using airplane passenger satisfaction data from the kaggle site, in this study a classification will be carried out to predict passenger satisfaction ratings. The confusion matrix method is used to measure accuracy performance. The measurement results in a random forest algorithm having the highest accuracy of 95%, a decision tree algorithm of 93% and naive bayes algorithm has the lowest accuracy of 82%.

Keywords : Machine Learning, Confusion Matrix, Decision Tree, Random Forest, Naive Bayes.