

## ABSTRAK

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Program Studi : Teknik Informatika

Judul : Perbandingan Tingkat Akurasi Algoritma C4.5, *Naïve Bayes*, dan *K-Nearest Neighbor* (K-NN) Pada *Dataset Channel YouTube* Indonesia

Saat ini zaman dimana media sosial sangat berpengaruh terhadap kehidupan masyarakat diseluruh dunia termasuk Indonesia. Media sosial ada dengan berbagai macam mulai dari *instagram*, *twitter*, *Youtube* dan yang lainnya. *Youtube* merupakan media sosial yang menyediakan *content* yang sangat menarik, didalam *Youtube* juga terdapat fitur yang dapat mempengaruhi penilaian terhadap *Channel Youtube* yaitu penilaian dari *Video Upload*, *Subscriber*, *Video View*. Data mining dapat digunakan dalam memprediksi *Grade Channel Youtube* Indonesia. Mengevaluasi perbandingan kinerja terbaik metode data mining algoritma C4.5, *Naïve Bayes* dan *K-Nearest Neighbor* (K-NN) menggunakan uji *k-fold Cross Validation* dengan nilai *k* yaitu 10 untuk perbandingan nilai akurasi. Dataset *Channel Youtube* di Indonesia yang digunakan berjumlah 100 record dengan empat indikator yang terdiri dari *Grade*, *Video Upload*, *Subscriber*, dan *Video View*. Data diolah menggunakan *software Jupyter Notebook*. Hasil penelitian didapatkan tingkat akurasi algoritma C4.5 lebih tinggi sebesar 46%, dibandingkan dengan algoritma *Naïve Bayes* sebesar 37% dan (K-NN) sebesar 33%.

Kata Kunci :

*Youtube*, Algoritma C4.5, *Naïve Bayes*, *K-Nearest Neighbor* (K-NN)

## ABSTRACT

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*Title* : Comparison of the Accuracy Levels of the C4.5, Naïve Bayes, and K-Nearest Neighbor (K-NN) Algorithms on the Indonesian YouTube Channel Dataset

*This is an era where social media is very influential on people's lives around the world, including Indonesia. There are various kinds of social media ranging from Instagram, Twitter, Youtube and others. Youtube is a social media that provides very interesting content, in Youtube there are also features that can affect the assessment of the Youtube Channel, namely the assessment of Video Upload, Subscriber, Video View. Data mining can be used to predict Indonesian Youtube Channel Grade. Evaluating the best performance comparison of the C4.5, Naïve Bayes and K-Nearest Neighbor (K-NN) algorithm data mining methods using the k-fold Cross Validation test with a k value of 10 for comparison of accuracy values. The Youtube Channel dataset in Indonesia used is 100 records with four indicators consisting of Grade, Video Upload, Subscriber, and Video View. Data is processed using Jupyter Notebook software. The results showed that the accuracy of the C4.5 algorithm was 46% higher, compared to the Naïve Bayes algorithm of 37% and (K-NN) of 33%.*

*Keywords:*

*Youtube, C4.5 Algorithm, Naïve Bayes, K-Nearest Neighbor (K-NN)*