# PENERAPAN METODE KLASIFIKASI DECISION TREE BERDASARKAN EKSTRAKSI CIRI HISTOGRAM OF ORIENTED GRADIENTS UNTUK PENGENALAN OBJEK MANUSIA PADA CITRA DIGITAL

**YULIANTO**
(Pembimbing : Ricardus Anggi Pramunendar, MCS)
*Teknik Informatika - S1, FIK, Universitas Dian Nuswantoro*
*www.dinus.ac.id*
*Email : 111201307345@mhs.dinus.ac.id*

## ABSTRAK

Penelitian pada bidang komputer vision dan pengenalan pola khususnya deteksi objek manusia pada citra atau video digital sangat penting karena banyak diimplementasikan pada berbagai sistem seperti kamera pengawas, otomasi kendaraan, sensor robot, serta konten manajemen visual. Mendeteksi objek manusia sangat sulit karena disebabkan beberapa faktor seperti kondisi pencahayaan, variasi pose tubuh, dan baju. Masalah lainya seperti keterhalangan objek serta kondisi latar belakang membuat objek manusia tampak berkamiflase sehingga dapat menurunkan tingkat akurasi deteksi. Dari permasalah tersebut diusulkan deteksi objek manusia dengan framework algoritma berbasis HOG â€“ Decision tree. Hasil percobaan menunjukkan tingkat akurasi yang cukup tinggi pada pengujian berbagai kondisi gambar tanpa proses perbaikan kualitas citra.

Kata Kunci : Deteksi objek manusia, HOG, Decision tree, Ekstraksi fitur

# IMPLEMENTATION OF DECISION TREE CLASSIFICATION METHOD BASED ON FEATURE EXTRACTION FROM HISTOGRAM OF ORIENTED GRADIENTS FOR HUMAN OBJECT RECOGNITION ON DIGITAL IMAGE

**YULIANTO**
(Lecturer : Ricardus Anggi Pramunendar, MCS)
*Bachelor of Informatics Engineering - S1, Faculty of Computer Science, DINUS University*
*www.dinus.ac.id*
*Email : 111201307345@mhs.dinus.ac.id*

## ABSTRACT

Research field on computer vision and pattern recognition, especially for human object tracking on an image or video digital are very important because it can be implemented in many systems such as image or video surveillance, automatic driver assistant car, robot sensor, visual content management, and much more. Human detection was very difficult, there are caused by several factors such as variation of illumination, pose, and clothes. And problems addition such as occlusion and background complicated where can make decreased rate of detection accuracy. From these several problems then proposed the method for handle these problems, using HOG - Decision tree framework based. The experimental results showed a very high degree of accuracy in testing a variety of images without the image enhancement process.

Keyword : Human object detection, HOG, Decision tree, Feature extraction