SKIN DETECTION USING HSV COLOR COMPONENT SUBTRACTION AND TEXTURE INFORMATION

INSTITUT PENGURUSAN PENYELIDIKAN
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM, SELANGOR
MALAYSIA

BY :

RIZAL BIN MAT JUSOH

NORHAZIMI BINTI HAMZAH

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UNIVERSITI TEKNOLOGI MARA
PULAU PINANG,
13500 Permatang Pauh, Pulau Pinang.
Tel: 604-3822888 Fax: 604-3822776

UNIVERSITI
TEKNOLOGI MARA
PULAU PINANG

Surat Kami : 600-UiTMPP(URDC: 5/2/235)

Tarikh : 26 Januari 2010

FAK. KEJ ELEKTRIK

Jalan Permatang Pauh
13500 Permatang Pauh
Pulau Pinang

Tel : 04-3822825
Faks : 04-3822819

Penolong Naib Canselor (Penyelidikan)
Institut Penyelidikan, Pembangunan dan Pengkomersilan
Universiti Teknologi MARA
40450 Shah Alam
Selangor

Y.Bhg.Prof,

LAPORAN AKHIR PENYELIDIKAN "SKIN DETECTION USING HSV COLOR COMPONENT SUBTRACTION AND TEXTURE INFORMATION "

Merujuk kepada perkara di atas, bersama-sama ini disertakan:

1. **Empat (4)** naskah Laporan Akhir Penyelidikan dan
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Sekian, untuk makluman dan tindakan Y.Bhg.Prof selanjutnya.

Terima kasih.

" SATU MALAYSIA, RAKYAT DI DAHULUKAN, PENCAPAIAN DI UTAMAKAN "

Yang benar,

RIZAL BIN MAT JUSOH
Ketua
Projek Penyelidikan

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ABSTRACT

This thesis presents skin detection algorithm for detecting human skin regions in color images. The input color image in RGB format is converted into HSV format for color components subtraction. The value component minus hue component is applied for first stage of skin detection. The result of the subtraction is considered as skin region candidates. From the skin region candidates rectangular box that enclosed that regions are estimated where the mean and standard deviation of that region is calculated for thresholding in RGB color space. The texture features also calculated for these skin candidates regions, where contrast, entropy and correlation are used. The texture features that are used also give good separation between skin and non skin regions. These texture features are used to verify that the segmented blobs are skin regions. The algorithm is tested on color images that concentrated on palm and face skin regions. The results from the testing show that the detection rate of skin is more than 90 percents which is achieved the set target.