

HCI/ComS 575X:
Computational Perception

Instructor: Alexander Stoytchev
http://www.cs.iastate.edu/~alex/classes/2007_Spring_575X/

Skin Color Detection

February 5, 2007

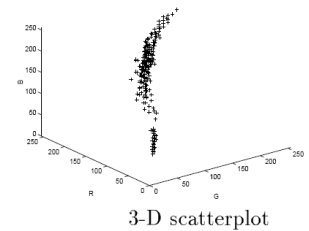
*HCI/ComS 575X: Computational Perception
Iowa State University, SPRING 2007
Copyright © 2007, Alexander Stoytchev*

“Skin-color modeling and adaptation”

Yang, Lu, and Waibel
CMU-CS-97-146, May 1997

(Available on the Class Web page)
[Readings Section]

3D Scatter Plot for a patch of skin

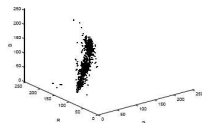


3-D scatterplot

Detecting Human Skin



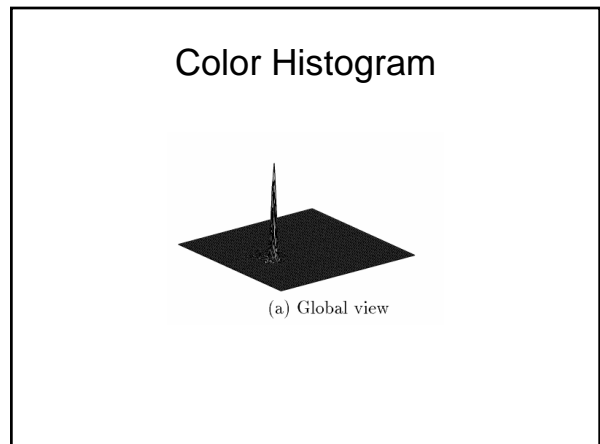
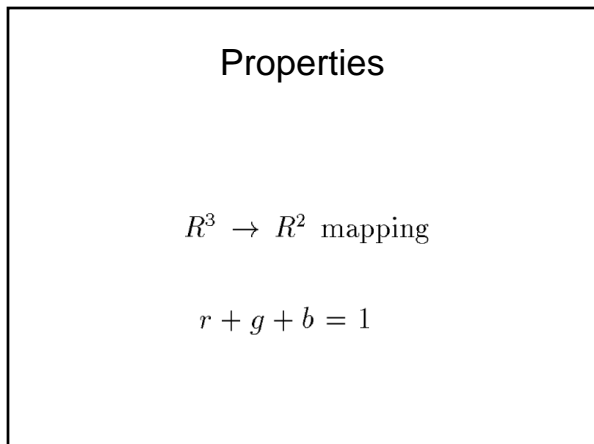
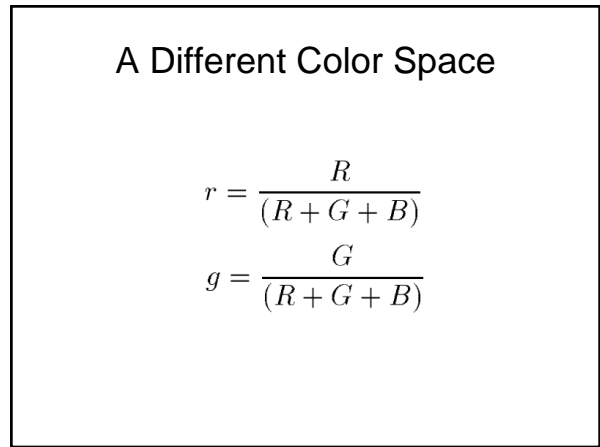
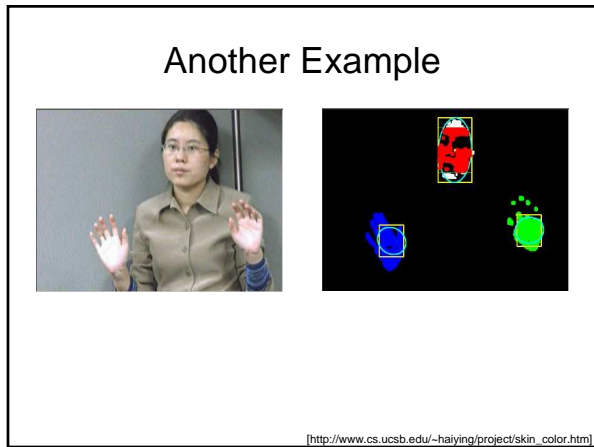
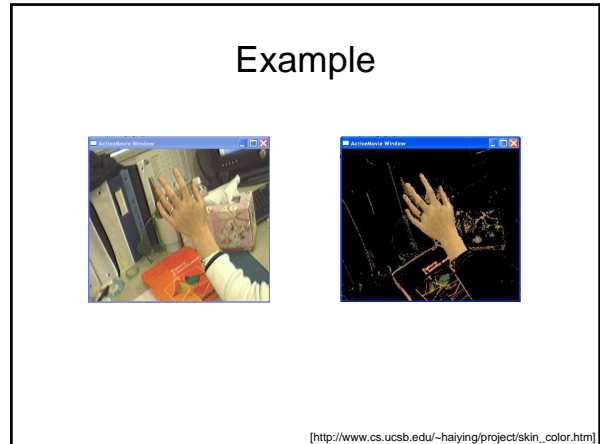
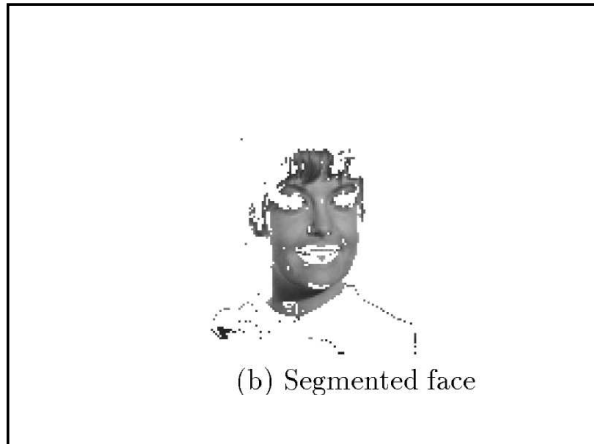
(a) Face image (color!)



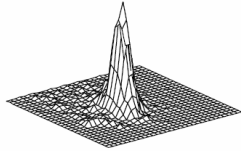
(b) Skin-color occurrences



(a) Original image



Color Histogram



(b) Local view

Matlab Demo of Skin Detection

(see code on the class web page)

Readings for next time

A. F. Bobick and J.W. Davis

``An appearance-based
representation of action".

In Proceedings of IEEE International
Conference on Pattern Recognition
1996,
August 1996, pp. 307-312.

A. Davis, J. and A. Bobick

``The Representation and
Recognition of Action Using
Temporal Templates",

In Proceedings of IEEE Conference
on Computer Vision and Pattern
Recognition,
June 1997, pp. 928-934.

THE END