

# CS 332 Visual Processing in Computer and Biological Vision Systems

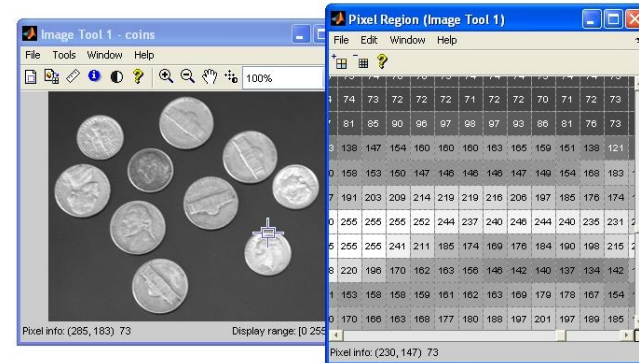
## Overview of Topics



**CS332 Visual Processing**  
Department of Computer Science  
Wellesley College

1

## Detection of image intensity changes



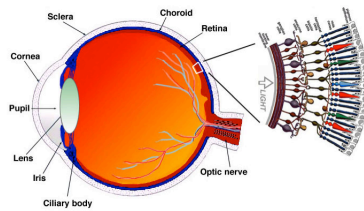
2

## Detecting intensity changes ...



... in computer vision systems

... in the human visual system

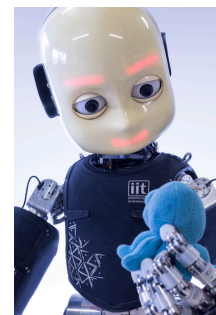


... & other primates

3

## Binocular stereo

left/right stereo images superimposed

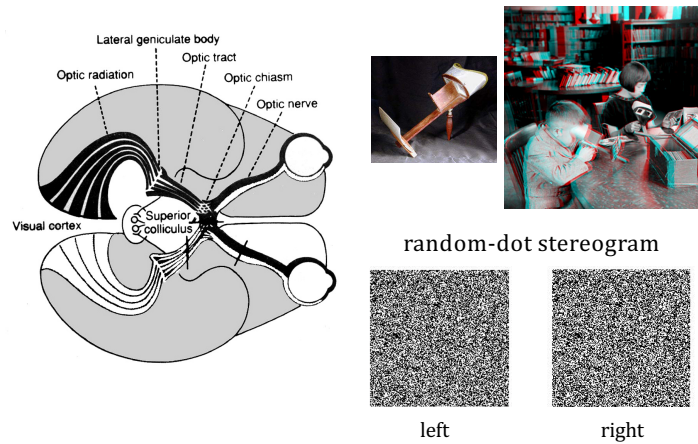


iCub robot  
Italian Institute of Technology



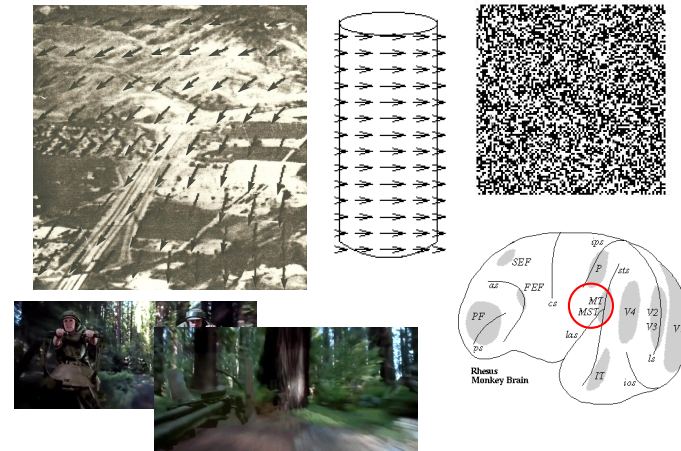
4

## Stereo processing in biological systems



5

## Analysis of visual motion



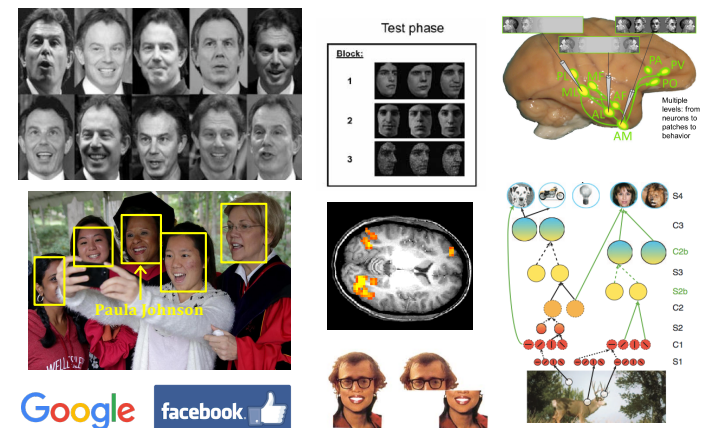
6

## Visual object recognition



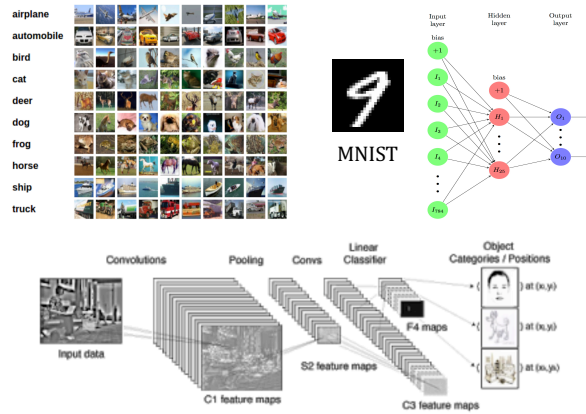
7

## Face recognition



8

## Learning to recognize objects & faces by training "deep networks"



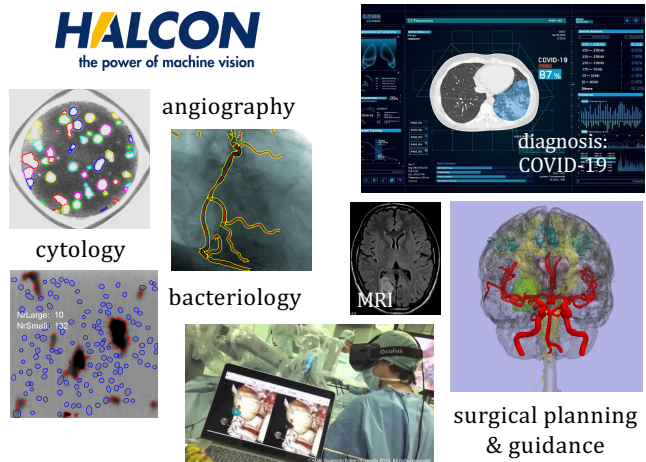
9

## Applications of computer vision systems



10

## Medical applications of computer vision



11