AUTOMATED ANTHROPOMETRIC MEASUREMENTS AND FEATURES EXTRACTION FROM 2D IMAGES

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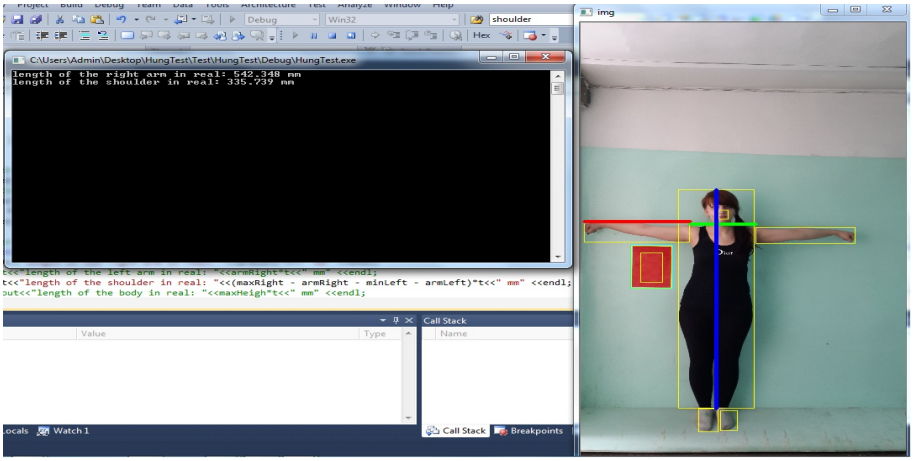
Our objective is real-time human body attributes recognition (height, shape, hair/eye/skin color, clothes color and gender) from video/pictures taken in a controlled (light and background) environment. In particular we measure the length of body, length of arms, width of shoulder, chest and wrist circumference. The detection of the contour of body jointly with calibration theory and background subtraction algorithms is used. In fact, images have noises so detection contour faces some issues we overcome using regularization theory. We also use background subtraction algorithm to detect change before and after of scene when object appears. It supports exactly detect contour.



Picture 1:Result of measurement width shoulder.
Length of right arm: 542.348 mm; Width of shoulder: 335.739 mm

Our purpose is build robust measure software for normal camera and mobile application. The applications area involve many fields including security.

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