Title: Dynamic anthropometric measurement via real-time 2d image processing (DAM-RT2DIP)

Type: Copyright

No.: SW-18873/2024

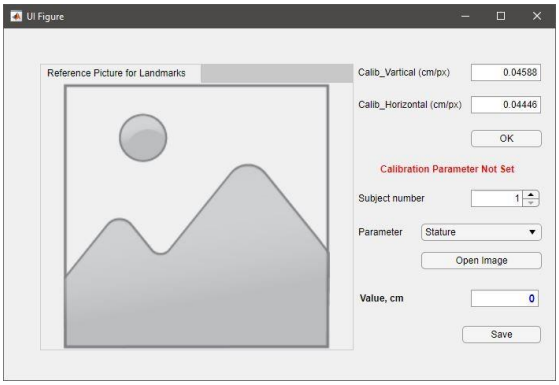
Date of grant: :31/05/2024

Details:

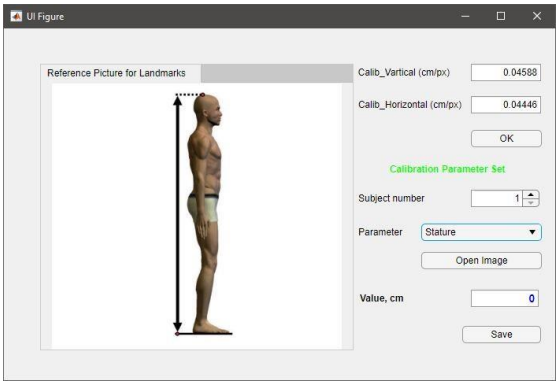
A computer program was developed to measure various linear dimensions from photographs, offering a streamlined approach to anthropometric data collection. Before using the program, the user must input calibration values for both horizontal and vertical parameters to ensure accurate measurements. These values are critical for scaling the image properly. Once the calibration is complete, the user opens the photograph and selects key landmarks as per the guidelines in ISO-7250(1), an international standard for body measurements.

The program processes the image by calculating the dimensions between the selected landmarks, thereby producing precise measurements for the desired parameter. The result is displayed to the user in real-time, simplifying the task of measuring body dimensions such as stature. This automated process eliminates manual measurement errors and saves time, making it highly efficient for researchers and practitioners in fields such as ergonomics and industrial design.

Figure 1 (A-E) presents a screenshot of the program in action, specifically demonstrating the measurement of stature. The tool offers a practical solution for accurate, standardized body measurements directly from digital images, adhering to international measurement standards.

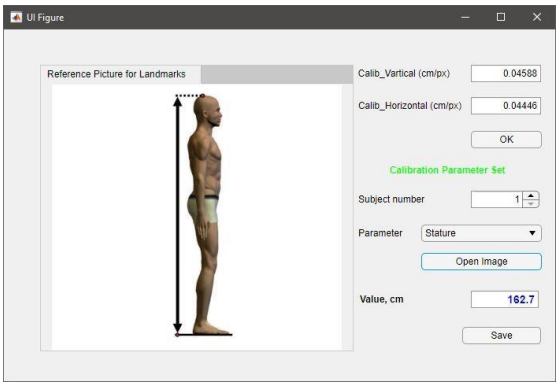


A: Home page

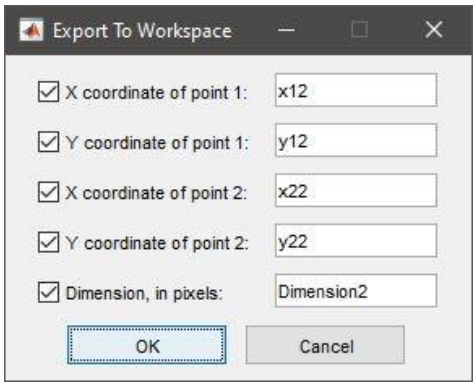


B: Calibration and parameter set

C: Landmark selection (Marked in red dot)



D: Result display



E: Export window

Fig. 1 (A – E) Screenshots of the developed app