

# The Development of an Advanced On Line Anthropometric Query System

林靜華, 呂柏昇

Industrial Management

Management

kate@chu.edu.tw

## Abstract

The traditional anthropometry database offered the query of the descriptive statistics of only 1D dimensions, e.g. waist girth, arm length, foot width, sitting height and etc. Nowadays using 3D scanning technologies can measure digital 3D surface shape from the human subjects and consequently enhance the database not only the traditional 1D dimension but as well as 2D and 3D anthropometry data. However, the development of 3D scanning anthropometry seemed not as quick and fruitful as mostly thought it to be. After time-consuming and hard working, the acquirement - 3D digital model could not offer for any applications yet. A variety of anthropometry data extracting algorithms are still developing. This article addressed a concept of the development of an advanced anthropometric query system. Including three parts first was the development of anthropometry database; second was an example of 3D measurement - body surface area; the last part was discussions about problems of 3D scanning measuring.

Keyword : Anthropometry, 3D scanning technology, body surface area