Deploying Reconfigurable 3D Scanning for Complex Anatomical Measurements

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Abstract

In the past 3D scanning has been constrained by either the need to create specialized units for a particular task (Face, Hand, Body etc) or the need to take multiple images and ‘stitch’ them together. Using active stereo photogrammetry it has been possible to take a much more flexible approach to the configuration and calibration a modular approach which preserves the advantage of ultra-fast image capture simultaneously from multiple viewpoints. Several medical units are now deploying reconfigurable 3dMD systems. This has also opened up a wide new range of clinical and anthropometric possibilities. In the world of prosthetics for example complex body wounds can be captured in one shot with minimal discomfort. In ergonomics complexities the interaction of the hand with an instrument can be accurate modelled. This presentation will look into how this form of 3D scanning has evolved over the past eight years with examples of successful projects. It will also describe the method of use and workflow and conclude with a discussion of the economics of use.

* www.3dmd.com