Application of Stereo Photogrammetry in Medicine

Chris LANE
3dMD*, Atlanta, USA

Abstract

The presentation will review the history and scientific foundation of 3D photogrammetry and how the technology has evolved to bridge the concept of a 3D photograph and a crucial medical modality. Different approaches to photogrammetry will be discussed and compared to traditional techniques of 3D surface scanning. Examples will be given of how 3D surface images can be used for a range of interdisciplinary patient assessments and planning including dentistry, surgery, prosthetics and genetics with an explanation on how to access the library of presented research using stereo photogrammetry. Techniques for image fusion with other 3D modalities will be explored and their potential to enable complex outcome planning and stimulation across multiple disciplines. The presentation will conclude with a brief glimpse into active academic projects exploring the use of 4D or dynamic image capture using stereo-photogrammetry.

* www.3dmd.com