



Combing 3D scanning and online server for application in medical education

PI : Chang Ming-Fong, Ph.D.

Department of Anatomy and Cell Biology, National Taiwan University

Experience:

Assistant-Professor, Department of Anatomy and Cell Biology, College of Medicine, National Taiwan University, Taipei, Taiwan, ROC

Teaching-Assistant, Department of Anatomy and Cell Biology, College of Medicine, National Taiwan University, Taipei, Taiwan, ROC

Ph.D., Department of Anatomy and Cell Biology, College of Medicine, National Taiwan University, Taipei, Taiwan, ROC

MS, Department of Anatomy and Cell Biology, College of Medicine, National Taiwan University, Taipei, Taiwan, ROC

Market Needs:

Medical education nowadays mainly conducts lecture and laboratory courses via face-to-face teaching, meaning that students only can observe specimens in the laboratory dissection room or hospitals. However, there are many individual differences in human structures which could not be taught or shared with other school's students due to time- and space-limitation. Besides, long-term use may cause valuable specimens damaged. Therefore, it is necessary and in great need for medical educators to transform specimens into 3D stereoscopic images/database for long-term storage and convenient usage. Manufacturers producing teaching aids and materials for medical education also can apply the technique of combing 3D scanning and online server to create new digital products without high production cost, leading to better economic benefits.

Our Technology:

We established a new application mode by combing 3D scanning and online server in medical education.

Strength:

- (A) The technique could scan cadavers dissected by medical students and clinically-collected specimens and store those structures digitally.
- (B) Combing with online server, learners in other schools or hospitals can observe the 3D digital files simultaneously. There is no related product created by the technique of combing 3D scanning and online server.

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(C)The application of combing 3D scanning and online server can let learners observe cadavers and specimens by distance learning in different schools or hospitals without transportation cost and time cost

(D)This application can preserve the cadavers and specimens with individual differences. For example, scanning the affected structures in rare disease and storing it in online server can preserve the 3D stereoscopic images of the structures and share it with learners in different places.

(E) Learners in different places can produce the special structures via 3D printing to conduct hands-on learning.

(F) The application of combing 3D scanning and online server can be used in cross-platforms, such as personal computers and mobile phones, meaning learner can learn anytime and everywhere.

Competing Products:

Manufacturers producing teaching aids and materials for medical education in Taiwan and abroad do not produce similar products.

Intellectual Properties:

In Taiwan, there is no similar patent or article describing this application.

Contact (do not need to fill out):

Center for Industry-Academia Collaboration, NTU
Tel: 02-3366-9945, E-mail: ordiac@ntu.edu.tw