

ADAPTIVE 3D MODELS GENERATED FROM 2D MRI IMAGES

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ABSTRACT

Creating Three-dimensional (3D) models from flat two-dimensional (2D) images can be a challenging task. This paper introduces the idea of repeatedly introducing new 2D image data into a given 3D Model with the express motive of altering the model. Augmenting models in a semi-real-time manor moves the primary use of 3D modelling away from games and photography and into new fields such as surgical/medical imaging and modelling.

The project incorporates multiple computer research areas, technologies and languages to achieve a 'three-dimensional' (3D) Model. The model data is then appended as new information becomes available from new images and the corresponding visual display is amended appropriately for the end user.

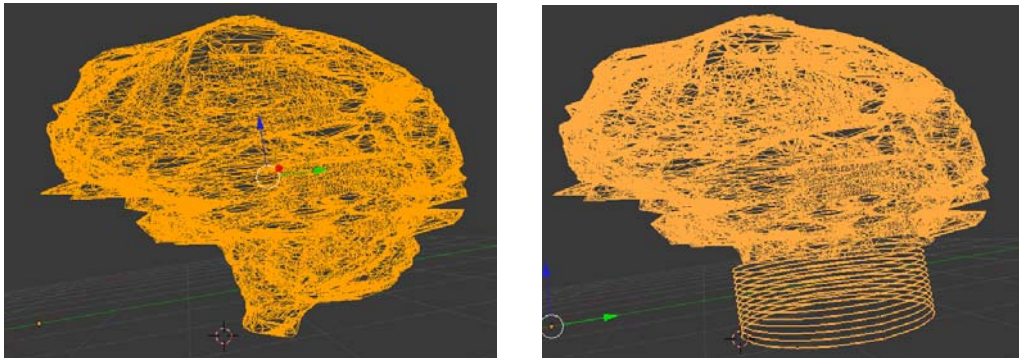


Figure 1. Plastic 3D Model Before and After Augmentation.

M Tennant, Adaptive 3D Models generated from 2D MRI Images, *Proc. 11th School Conf. for Annual Research Projects*, V F Ruiz (Ed), pp. 403–406, University of Reading, 29 May 2012.