# AUGMENTED REALITY IN AUTOMATIC SEGMENTATION OF SPINAL INTERVERTEBRAL DISKS AND CORD AND 3D VISUALIZATION IN VIRTUAL REALITY

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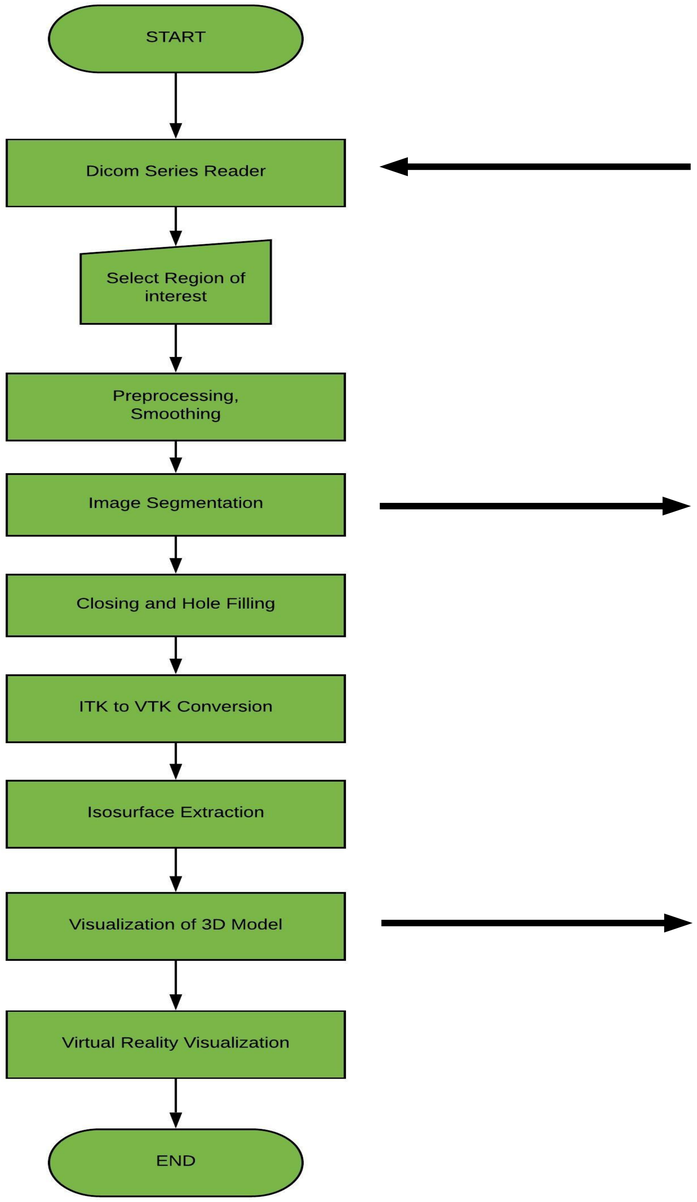


Figure 1. MRI Input Data

Figure 2. Segmented Image

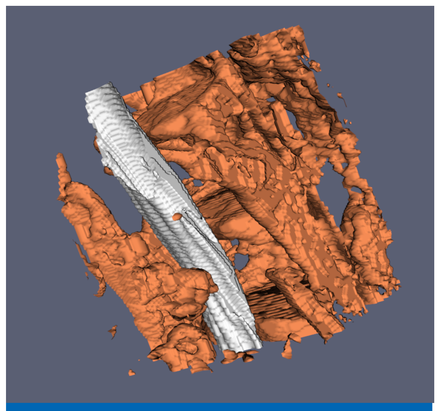

Figure 3. 3D Model Visualization

- MRI data in DICOM format is the input of the application.
- Region of Interest is selected manually from the doctor.
- The program runs automatically to get a 3D segmented Volume.
- The 3D Volume is visualized in the screen and also can be visualized in a Virtual Reality headset.

- The visualization in Virtual Reality adds more possibilities of interacting with the model and a closer view.
- Choosing a Region of Interest(ROI) manually, gives doctor the possibility of a 3D model specifically segmented and speeds up the running time of the application.
- The spinal cord and disks are visualized in different colors for better assessment of the contact with one another

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