Abstract

Vascular diseases are nowadays one of the serious issues which have a huge impact on someone's life. Number of researchers at different universities as well as medical device manufacturers are working in this field for better understanding of the vascular characteristics. It is expected that three dimensional structure of blood vessels can provide comprehensive visualization of vessel geometry. This information will be useful in diagnosis and therapy related to vascular diseases. Several studies describe different numerical approaches to reconstruct a modeling of blood vessels closest to reality by using medical imaging. This paper gives extensive literature survey on segmentation and reconstruction techniques for artery modeling that uses various image modalities such as X Ray Angiography, Magnetic Resonance Angiography, Computed Tomography Angiography, Ultrasound etc. for the assessment of blood vessels.

References


**Index Terms**

- Computer Science
- Biomedical
Keywords

3D model; segmentation and detection; centerline extraction