

Accepted Manuscript

Blood vessel modeling for interactive simulation of interventional neuroradiology procedures

E. Kerrien, A. Yureidini, J. Dequidt, C. Duriez, R. Anxionnat, S. Cotin

PII: S1361-8415(16)30182-7
DOI: [10.1016/j.media.2016.10.003](https://doi.org/10.1016/j.media.2016.10.003)
Reference: MEDIMA 1198



To appear in: *Medical Image Analysis*

Received date: 24 December 2015
Revised date: 3 October 2016
Accepted date: 8 October 2016

Please cite this article as: E. Kerrien, A. Yureidini, J. Dequidt, C. Duriez, R. Anxionnat, S. Cotin, Blood vessel modeling for interactive simulation of interventional neuroradiology procedures, *Medical Image Analysis* (2016), doi: [10.1016/j.media.2016.10.003](https://doi.org/10.1016/j.media.2016.10.003)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- A new vasculature model in the form of a tree of local implicit functions.
- An original RANSAC-based blood vessel centerline tracking algorithm.
- An efficient algorithm to fit local contour points with implicit surfaces.
- An extensive validation on 3D Rotational Angiography data.
- The demonstration of how our model can benefit the simulation of IR procedures.

Download English Version:

<https://daneshyari.com/en/article/6878147>

Download Persian Version:

<https://daneshyari.com/article/6878147>

[Daneshyari.com](https://daneshyari.com)