

عنوان مقاله:

Automatic Centerline Extraction of Coronary Arteries in Computed Tomography Angiography Images

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خلاصه مقاله:

In this paper, we present an automatic method for extracting centerlines of coronary arteries in contrast enhanced (CE)-CT angiography scans. The proposed algorithm first detects the aorta which is used as an initial mask for ostia detection. Second, the ostia locations are detected via a vessel centerline extraction method which tracks the center axis of the coronaries starting from the aorta surface. The full centerline tree of the coronary arteries is computed via the Region Growing algorithm which is based on geometrical features of vessels and starts a tracking process from the ostia locations until all the branches are detected

کلمات کلیدی:

Coronary computed tomographic angiography (CCTA), Coronary artery, Centerline, Automatic extraction, geometrical feature

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