



**RESEARCH ARTICLE**

# **EDGE-BASED JUNCTION DETECTOR OPERATOR ON CIRCUMFERENTIAL ANCHORS FOR 3D RECONSTRUCTION**

**M. Shenbagam<sup>1</sup>, V. Vivekanandhan<sup>2</sup>**

Jayaram College of Engineering and Technology  
Department of Computer Science and Engineering  
<sup>1</sup> shen\_jo@rediff.com, <sup>2</sup> vivek\_7677@hotmail.com

*Abstract - A junction is defined as a meeting point of two or more ridges in the gradient domain into which an image can be transformed through Gaussian derivative filters. To accelerate the detection process, two binary edge maps are produced; a thick-edge map is obtained by imposing a threshold on the gradient magnitude image, and another thin-edge map is obtained by calculating the local maxima. Circular masks are centered at putative junctions in the thick-edge map, and the so-called circumferential anchors or CA points are detected in the thin map. Radial lines are scanned to determine the presence of junctions. JUDOCA Introduce a new algorithm for measuring the detection accuracy and so-called junction coordinate systems. In proposed system the Location of the Edge will be detected accurately in 3D Reconstruction and reconnect the edges.*

***Index terms - MoravecCorner Detection Algorithm; SUSAN; JUDOCA***

Full Text: <http://www.ijcsmc.com/docs/papers/November2013/V2I11201306.pdf>