



FEATURE-BASED TRACKING USING 3D PHYSICS-BASED DEFORMABLE SURFACES (TueAmOR1)

★ Author(s) :

Michail Krinidis
Nikos Nikolaidis
Ioannis Pitas

(Aristotle University of Thessaloniki, Greece)

(Aristotle University of Thessaloniki, Greece)

(Aristotle University of Thessaloniki, Greece)

★ Abstract :

This paper presents a novel approach for tracking feature points in video sequences. In this method, the image intensity is represented by a 3D deformable surface model. Tracking is performed by exploiting a by-product of explicit surface deformation governing equations. The proposed method was compared with the well known KLT tracking algorithm, in terms of tracking accuracy and robustness. The obtained results show the superiority of the proposed method.