



FAST IMPLEMENTATION OF VARIATIONAL, CONTOUR-BASED OBJECT TRACKING (TueAmOR1)

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★ Abstract :

We present a fast contour-based object tracking using an active contour which clings towards the maximum of contrast alongside the object boundary. The contour motion, modeled by a time-differential equation, is driven by a gradient descent flow with a variable integration time step. The best-fit time step to reach the extrema of the functional is estimated in the least squared error sense. The stability of the solution is reached in a few iterations. The performance is shown on a driver's head tracking application.