



Tracking a Rotating Object with ProAnalyst®

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Abstract


ProAnalyst's feature rotation algorithm can automatically track rotating objects by comparing rotated versions of a feature template against its search region to find a match. The feature template is rotated across a user specified Angular Range, and the best match over the entire range of rotation is returned as a final match.

Files Needed for This Tutorial

Click [here](#) to download these files.

spindisksub.avi
spindisksub.clb
spindisksub.ftk

spindisksub.gfc
tracking_rotation.mpj

1. Click the  icon to open the **Feature Tracking** control panel.
2. Press the **Enable** button.
3. Define and set a region around the feature that you wish to track as shown below:

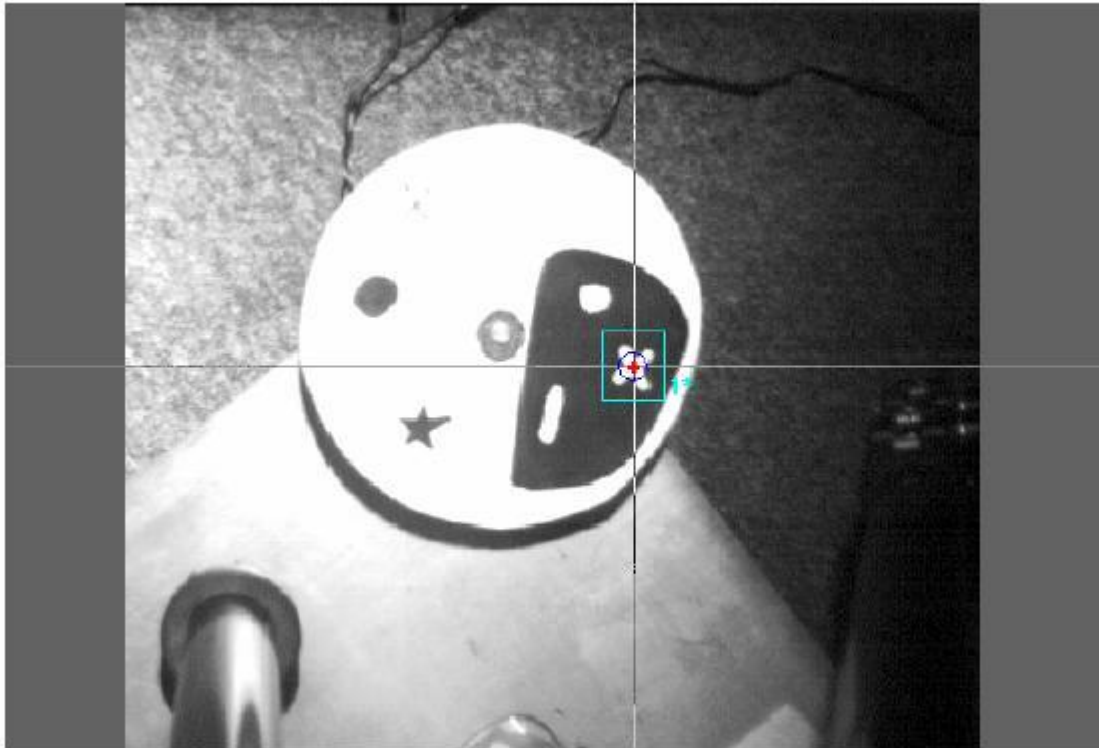


Figure 1:


4. Click the  icon to open the Track Settings window
5. **Enable Feature Rotation** by clicking the **Enable** check box as shown below:



Figure 2:

6. Input an "Angular Range" and "Step Size" in degrees. The feature template will be rotated plus or minus the Angular Range value in intervals of step size. For example, a rotation range of 30 degrees with a step size of 5 will examine the range of -30 to 30 degrees in 5 degree intervals.



Figure 3:

7. Click the **Apply** button, followed by the **Close** button.
8. Press the **Track Forward** button. ProAnalyst will display the feature track as it happens frame by frame.

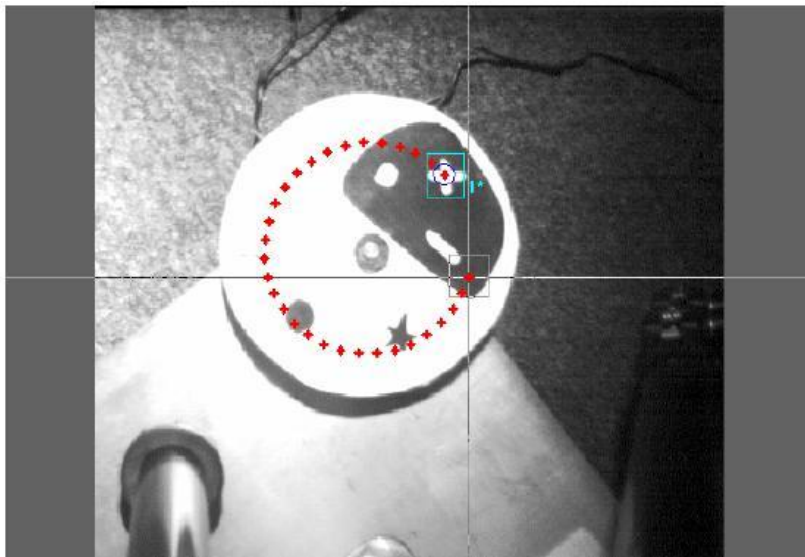


Figure 4:

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