Figure 8: Segmentations of two consecutive frames. The segmentation in both frames is not consistent. Segments split and merge which can be observed from the highlighted contours.

Figure 9: The process of region tracing. A segment $s$ is traced through a temporal window of $\pm w = 2$ frames by optical flow. The resulting trace of segment $s$ contains the traced segments $s_{-2}$, $s_{-1}$, $s_{+1}$, and $s_{+2}$.

Figure 10: The process of trace intersection. The trace of segment $s$ is intersected with the segments $k$, $u$, $v$, and $w$ in the neighboring frames. Gray regions represent the area of intersection with the trace. A temporal relationship (link) is established if the confidence $c$ is higher than a threshold $C$. The trace intersection handles cases of splitting and merging as well as gaps in the temporal succession of segments.