

Abstract

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matching occluded objects invariant to rotations, translations, reflections, scale changes

in this paper, a new algorithm for recognizing partially occluded objects is introduced. the proposed algorithm is based on searching for first three matched connected lines in both occluded model objects, then left/right lines in both occluded model objects are marked as matched lines as long as they have the same relations of distance/ratio/angle to the last matched connected lines. the process is repeated until there is no more three matched connected lines. the ratio_test is then performed to detect scattered matched points/lines. the new algorithm is invariant to translations, rotations, reflections, scale changes. has computational complexity of $O(m.n)$.