

A FUZZY STRING MATCHING METHOD FOR RECOGNIZING PARTIALLY OCCLUDED OBJECTS

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ABSTRACT

In this paper, we propose a fuzzy shortest path method to solve the occluded shape matching problems. The edit distance is formulated as a fuzzy number instead of a real number. Therefore, the edit cost is also a fuzzy number. The string matching problems were then equivalent to a fuzzy shortest path problem. The memberships for the input shape with the reference shapes are then determined as fuzzy numbers. By performing a simple ranking fuzzy numbers algorithm, the input shape is classified as the reference shape that has the minimum fuzzy edit cost.

Keywords: Occluded shape, cyclic string matching, fuzzy sets, shortest path.