PACKING METHODS OF N-DIMENSIONAL ORTHOGONAL POLYHEDRAL

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The report considers the problem of packing n-dimensional items defined structure in closed bounded n-dimensional object. It is known fact that cutting-packing problems belong to the class NP-hard problems.

N-dimensional orthogonal polyhedral (n-OP) is an object consisting of a finite number of disjoint n-dimensional rectangular parallelepipeds. An important point in solving the general Packing Problem is designing method of packing (pattern) (see [1]).

The report proposes an algorithm of coordinate-wise stacking, consisting of two stages. On the ground there is preparation n-OP to his placement: each n-OP compared sequences of rectangular blocks (tuple-functions). On the second - finding the coordinates of the initial point of the n-OP in packing object with the necessary and sufficient conditions for the admissibility of the packing (see [2]).

The report proposed a method for obtaining packing lower boundary based on dual fusible functions. The numerical experiment held.

REFERENCES

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