PARALLEL EVOLUTIONARY OPTIMIZATION
ALGORITHM WITH GRADIENT
INDIVIDUAL’S IMPROVEMENT

Summary: In the paper the hybrid optimization algorithm was proposed. The algorithm was build with typical floating-point evolutionary algorithm joined with gradient improvement of a group of the best individuals. The calculations were carried out for a test goal function for cases of different number of locally best solutions and next effectiveness and stability of proposed algorithm were compared for different number of improved individuals.

Keywords: hybrid algorithms, evolutionary algorithms