Ibraheem Alolyan* (ialolyan@ksu.edu.sa). A global Optimization Technique for finding the minimum of a Vector Function.

In this paper we find the minimum of a vector function defined in a box using discarding algorithm. The algorithm splits the domain to smaller cells and each cell is checked by a minimization test. If the cell satisfied the condition it will be kept and it might have the optimal solution. If it does not satisfy the condition it will be omitted. Our goal of this paper is to find such a test then study the convergence of the method and give numerical examples. (Received August 08, 2015)