## Multi-Objective Optimization of Combined System Reliability and Redundancy Allocation Problem

Authors : Vijaya K. Srivastava, Davide Spinello

**Abstract :** This paper presents established 3<strong><sup>n</sup></strong> enumeration procedure for mixed integer optimization problems for solving multi-objective reliability and redundancy allocation problem subject to design constraints. The formulated problem is to find the optimum level of unit reliability and the number of units for each subsystem. A number of illustrative examples are provided and compared to indicate the application of the superiority of the proposed method.

**Keywords :** integer programming, mixed integer programming, multi-objective optimization, Reliability Redundancy Allocation **Conference Title :** ICCMS 2019 : International Conference on Computational and Mathematical Sciences

Conference Location : Montreal, Canada

Conference Dates : August 05-06, 2019