New algorithms for solving discrete vector optimization problems

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Abstract

We present some counterparts of the Jahn-Graef-Younes method for solving discrete vector optimization problems. Our approach is based on a pre-sorting scheme via certain cone-monotonic functions. In particular, we analyze the case where the ordering cone is polyhedral. Numerical experiments in MATLAB are obtained for discrete bicriteria optimization problems. These results are based on a joint research with Christian Günther (Martin Luther University Halle-Wittenberg, Germany).