On Computation of s-g Inverse

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Abstract

Recent developments in the area of generalized inverses include the introduction of several new techniques of computing different generalized inverses. The techniques such as bordering method, inverse complemented matrix method etc., have made the computation simpler and less tedious.

The involution of secondary-transpose was introduced in 1970's and is found to have combinatorial significance. The Moore-Penrose inverse of a real rectangular matrix with reference to the involution of secondary-transpose is called the s-g inverse. In this talk, we present different methods of computing s-g inverse of a given matrix using the techniques such as rank factorization, bordering method, and inverse complemented matrix method.

Keywords

Secondary transpose, s-g inverse, Inverse complemented matrix method, Bordering method.

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