

## عنوان مقاله:

Boolean expression based on hypergraphs with algorithm

# محل انتشار:

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نویسندگان: Mohammad Hamidi - Department of mathematics, Payame Noor university, Tehran, Iran

.Marzieh Rahmati - Department of mathematics, Payame Noor university, Tehran, Iran

Akbar Rezaei - Department of Mathemtics, Payame Noor University, Tehran, Iran

### خلاصه مقاله:

This paper introduces a novel concept of Boolean function--based hypergraph with respect to any given T.B.T(total binary truth table). This study defines a notation of kernel set on switching functions and proves that every T.B.T corresponds to a Minimum Boolean expression via kernel set and presents some conditions on T.B.T to obtain a Minimum irreducible Boolean expression from switching functions. Finally, we present an algorithm and so Python programming(with complete and original codes) such that for any given T.B.T, introduces a Minimum irreducible .switching expression

**کلمات کلیدی:** Switching function, Boolean function--based hypergraph, switching kernel, T.B.T

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