Berghammer, Rudolf
Relational modelling and solution of chessboard problems. (English) Zbl 1329.68234
de Swart, Harrie (ed.), Relational and algebraic methods in computer science. 12th international confer-

Summary: We describe a simple computing technique for solving independence and domination problems
on rectangular chessboards. It rests upon relational modelling and uses the BDD-based tool RelView
for the evaluation of the relation-algebraic expressions that specify the problems’ solutions and the vi-
sualization of the computed results. The technique described in the paper is very flexible and especially
appropriate for experimentation. It can easily be applied to other chessboard problems.

For the entire collection see [Zbl 1215.68027].

MSC:
68T20 Problem solving in the context of artificial intelligence (heuristics, search strategies, etc.)
03G15 Cylindric and polyadic algebras; relation algebras

Software:
RelView

Full Text: DOI