

Relation Data Model with Cause-Effect Association

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ABSTRACT

RCEAS is an experimental system developed by the authors. It explores the application of the knowledge representation and deductive inference of Artificial Intelligence to CRDBMS which is a small relational database management system designed by the authors and is implemented on a PDP-11/23 computer.

This paper describes the Cause-Effect Association suggested in Su and Lo's SAM model by logic formulas based on the analysis of formal logic. It gives an account of the techniques that implement this association. RCEAS can represent certain specific basic cause-effect rules, and once it has all these rules input into the system, it can make deductive reasoning to obtain new rules and assertions, or find out the cause from a given effect, and vice versa.

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