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Extracting easily interpreted diagnostic rules

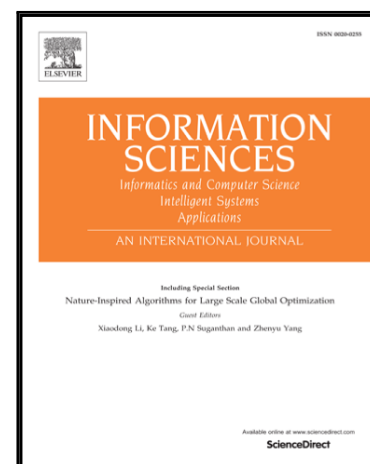
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Highlights

- Diagnostic rules are formulated as fuzzy focal elements using the Dempster-Shafer and fuzzy set theories.
- A data-driven rule extraction algorithm is proposed that results in a set of rules which are easy to interpret by a human user (an expert).
- An evaluation of rules regarding their effectiveness in a diagnosis is proposed.
- Test results for benchmark databases show that the proposed method is better or comparable to existing approaches, but more suitable for a medical expert and a knowledge engineer collaboration.

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