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Interpretable and accurate medical data classification - a multi-objective genetic-fuzzy optimization approach

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Highlights

- Novel fuzzy rule-based system (FRBS) for medical data classification tasks is proposed.
- FRBSs are designed using multi-objective evolutionary optimization algorithms.
- Set of FRBSs with various levels of accuracy-interpretability trade-off is generated.
- Benchmark medical data sets are used to evaluate the effectiveness of the system.
- Highly interpretable and accurate medical decision support is provided by our approach.

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