A systematic review on applications of multi-objective evolutionary algorithms for feature selection*

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Classification is a well-known Data Mining (DM) task to extract patterns from data able to predict the label of new data. Feature Selection (FS), a usual preprocessing task in DM, can improve classification. Multi-objective Genetic Algorithms (MOGA) are evolutionary meta-heuristics that have been applied for FS by optimizing feature importance measures as fitness functions. Due to the lack of surveys on MOGA applications for FS, we updated in 2014 a pioneer, replicable and rigorous Systematic literature Review (SR) on the subject [1]. As a result, 70 papers were selected and summarized. We found, for example, that Pareto-based MOGA has been the most usual choice. The SR summary could motivate and support design decisions regarding new MOGA applications for FS.

[1] http://goo.gl/UdPeP

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