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Using Genetic Algorithm for the Optimization of RadViz Dimension Arrangement Problem

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order of the dimensions along the visualization anchors. According to the nature of this problem it is treated as an NP-complete problem; where optimization tools are required for solving such a problem. In this study, Researchers implemented the genetic algorithm (GA) to be used for the dimension arrangement optimization of radial coordinate visualization tools. During the testing of GA we work with a dataset of proteomic data to preserve the pairwise structural relations of the dataset instances as much as possible. We compared the result obtained using our GA optimization with some solutions obtained without optimization, and we found that our result was close to the optimal solution 4 times more than non-optimized solution.

Keywords

High-Dimensional Data **NP-Complete Problem**

Genetic Algorithm (GA)

Radial Coordinate Visualization (RADVIZ)

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