



International Conference on Intelligent Vision and Computing.

ICIVC 2022: **Proceedings of International Conference on Intelligent Vision and Computing (ICIVC 2022)**, pp 580–588

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Using Genetic Algorithm for the Optimization of RadViz Dimension Arrangement Problem

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Conference paper | [First Online: 01 May 2023](#)

70 Accesses

Part of the [Proceedings in Adaptation, Learning and Optimization](#) book series (PALO,volume 17)

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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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Proceedings in Adaptation, Learning and Optimization, vol
17. Springer, Cham. https://doi.org/10.1007/978-3-031-31164-2_49

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DOI	Published	Publisher Name
https://doi.org/10.1007/978-3-031-31164-2_49	01 May 2023	Springer, Cham

Print ISBN	Online ISBN	eBook Packages
978-3-031-31163-5	978-3-031-31164-2	Intelligent Technologies and Robotics Intelligent Technologies and Robotics (R0)

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