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| Name | Summary | Methodology | Advantages |
| Zhang, B. (2020). Research on the construction and simulation of PO-Dijkstra algorithm model in parallel network of multicore platform. *EURASIP Journal on Wireless Communications and Networking*, *2020*(1), 1-14. | This paper presents a parallel Dijkstra algorithm for multicore platform which has split and parallelized the classical Dijkstra algorithm by the multi-threaded programming tool OpenMP. Although there is more consumption of resources, the algorithm adjusts the parameters such as the number of cores in use to lower the consumption and improve performance. | The paper focuses on Application program algorithm optimization method: It is the optimization of the procedure algorithm, which means improve the computational complexity of the algorithm. The main optimization methods are as follows: (a) avoid redundant function calls, (b) avoid unnecessary border checks, (c) avoid double counting of intermediate results, and (d) parallelize serial program. | The speed of the algorithm has been significantly improved after parallelization, when the number of nodes reaches 2000, the computing speed is increased by 35%.  The serial program requires more cores compared to the parallel algorithm to achieve the same performance. |

https://jwcn-eurasipjournals.springeropen.com/articles/10.1186/s13638-020-01680-x