Bibliography

[1] Nguyen Dang and Patrick De Causmaecker. "Analysis of algorithm components and parameters: some case studies". In: *International Conference on Learning and Intelligent Optimization*. Springer. 2018, pp. 288–303.

[2] David S Johnson et al. "Experimental analysis of heuristics for the ATSP". In: *The traveling salesman problem and its variations*. Springer, 2007, pp. 445–487.

[3] M. Dorigo, V. Maniezzo, and A. Colorni. "Ant system: optimization by a colony of cooperating agents". In: *IEEE Transactions on Systems, Man, and Cybernetics, Part B (Cybernetics)* 26.1 (1996), pp. 29–41. DOI: 10.1109/3477.484436.

[4] Mauro Birattari and Janusz Kacprzyk. *Tuning metaheuristics: a machine learning perspective*. Vol. 197. Springer, 2009.

[5] S. K. Smit and A. E. Eiben. "Comparing parameter tuning methods for evolutionary algorithms". In: *2009 IEEE Congress on Evolutionary Computation*. 2009, pp. 399–406. DOI: 10.1109/CEC.2009.4982974.

[6] Peng Li and Hua Zhu. "Parameter selection for ant colony algorithm based on bacterial foraging algorithm". In: *Mathematical Problems in Engineering* 2016 (2016).

[7] Matthias Feurer and Frank Hutter. "Hyperparameter optimization". In: *Automated Machine Learning*. Springer, Cham, 2019, pp. 3–33.

[8] Abraham P Punnen. "The traveling salesman problem: Applications, formulations and variations". In: *The traveling salesman problem and its variations*. Springer, 2007, pp. 1–28.

[9]   C. Huang, Y. Li, and X. Yao. "A Survey of Automatic Parameter Tuning Methods for Metaheuristics". In: *IEEE Transactions on Evolutionary Computation* 24.2 (2020), pp. 201–216. DOI: `10.1109/TEVC.2019.2921598`.

[10]   Dorian Gaertner and Keith L Clark. "On Optimal Parameters for Ant Colony Optimization Algorithms." In: *IC-AI*. Citeseer. 2005, pp. 83–89.

[11]   Pauli Virtanen et al. "SciPy 1.0: Fundamental Algorithms for Scientific Computing in Python". In: *Nature Methods* 17 (2020), pp. 261–272. DOI: `10.1038/s41592-019-0686-2`.

[12]   C. E. Rasmussen and C. K. I. Williams. *Gaussian Processes for Machine Learning*. the MIT Press, 2006. ISBN: 026218253X.

[13]   Eric Brochu, Vlad M. Cora, and Nando de Freitas. *A Tutorial on Bayesian Optimization of Expensive Cost Functions, with Application to Active User Modeling and Hierarchical Reinforcement Learning*. 2010. arXiv: `1012.2599 [cs.LG]`.

[14]   Cristiano Cervellera and Danilo Maccio. "Learning With Kernel Smoothing Models and Low-Discrepancy Sampling". In: *IEEE Transactions on Neural Networks and Learning Systems* 24.3 (2013), pp. 504–509. DOI: `10.1109/TNNLS.2012.2236353`.

[15]   C. Schretter, L. Kobbelt, and Paul-Olivier Dehaye. "Golden Ratio Sequences for Low-Discrepancy Sampling". In: *J. Graph. Tools* 16 (2012), pp. 95–104.

[16]   Frank Hutter, Holger H Hoos, and Thomas Stützle. "Automatic algorithm configuration based on local search". In: *Aaai*. Vol. 7. 2007, pp. 1152–1157.

[17]   Eduardo Batista de Moraes Barbosa and Edson Luiz França Senne. "Improving the fine-tuning of metaheuristics: an approach combining design of experiments and racing algorithms". In: *Journal of Optimization* 2017 (2017). DOI: `https://doi.org/10.1155/2017/8042436`.

[18]   Tim Head et al. "scikit-optimize/scikit-optimize". Version 0.8.1. In: (Sept. 2020). DOI: `10.5281/zenodo.4014775`.

[19]   Gerhard Reinelt. "TSPLIB—A traveling salesman problem library". In: *ORSA journal on computing* 3.4 (1991), pp. 376–384.

[20]   Thomas Hammerl. *Ant colony optimization for tree and hypertree de-compositions*. 2009.

Appendix A

Implementation

The implementation of the optimization procedure can be found at the following github repo: https://github.com/klaswijk/bayesian-tuning.

The libaco implementation can be found at the following github repo: https://github.com/emmyyin/libaco.