

## EK-1: KAYNAKLAR

1. Haklı, H. (2013). Sürekli fonksiyonların optimizasyonu için doğa esinli algoritmaların geliştirilmesi (Yüksek Lisans Tezi, Selçuk Üniversitesi Fen Bilimleri Enstitüsü).
2. Kahraman H.T., Aras S., Gedikli E., "Meta-Sezgisel Optimizasyon Çalışmalarında Benchmark Problemlerinde Karşılaşılan Standartsızlıklar Ve Çözüm Önerileri", International Academic Research Congress, Antalya, Türkiye, 30 Ekim – 3 Aralık 2018, Pp. 1494-1501.
3. Kahraman Hamdi Tolga, Aras Sefa, Gedikli Eyüp, Meta-Sezgisel Algoritmaların Deneysel Çalışmalarındaki Standartsızlıklar Ve Çözüm Önerileri, International Academic Research Congress, 30 Ekim-3 Kasım 2018, 1466-1472.
4. Lai, W., Zhou, M., Hu, F., Bian, K., & Song, Q. (2019). A New DBSCAN Parameters Determination Method Based on Improved MVO. IEEE Access, 7, 104085-104095.
5. Pham, H. N. A., & Triantaphyllou, E. (2009). An application of a new meta-heuristic for optimizing the classification accuracy when analyzing some medical datasets. Expert Systems with Applications, 36(5), 9240-9249.
6. Kahraman, H. T. (2016). A novel and powerful hybrid classifier method: Development and testing of heuristic k-nn algorithm with fuzzy distance metric. Data & Knowledge Engineering, 103, 44-59.
7. Fong, S., Deb, S., & Yang, X. S. (2018). How meta-heuristic algorithms contribute to deep learning in the hype of big data analytics. In Progress in Intelligent Computing Techniques: Theory, Practice, and Applications (pp. 3-25). Springer, Singapore.
8. Tayal, A., & Singh, S. P. (2018). Integrating big data analytic and hybrid firefly-chaotic simulated annealing approach for facility layout problem. Annals of Operations Research, 270(1-2), 489-514.
9. Dosoglu, M. K., Guvenc, U., Duman, S., Sonmez, Y., & Kahraman, H. T. (2018). Symbiotic organisms search optimization algorithm for economic/emission dispatch problem in power systems. Neural Computing and Applications, 29(3), 721-737.
10. Zhang, J., Ding, G., Zou, Y., Qin, S., & Fu, J. (2019). Review of job shop scheduling research and its new perspectives under Industry 4.0. Journal of Intelligent Manufacturing, 30(4), 1809-1830.
11. Tian, D., Zhao, X., & Shi, Z. (2019). Chaotic particle swarm optimization with sigmoid-based acceleration coefficients for numerical function optimization. Swarm and Evolutionary Computation, 100573.
12. Gupta, S., & Deep, K. (2019). A hybrid self-adaptive sine cosine algorithm with opposition based learning. Expert Systems with Applications, 119, 210-230.
13. Jana, B., Mitra, S., & Acharyya, S. (2019). Repository and Mutation based Particle Swarm Optimization (RMPSO): A new PSO variant applied to reconstruction of Gene Regulatory Network. Applied Soft Computing, 74, 330-355.
14. Wu, L., Liu, Q., Tian, X., Zhang, J., & Xiao, W. (2018). A new improved fruit fly optimization algorithm IAFOA and its application to solve engineering optimization problems. Knowledge-Based Systems, 144, 153-173.
15. Sun, G., Ma, P., Ren, J., Zhang, A., & Jia, X. (2018). A stability constrained adaptive alpha for gravitational search algorithm. Knowledge-Based Systems, 139, 200-213.
16. Long, W., Jiao, J., Liang, X., & Tang, M. (2018). An exploration-enhanced grey wolf optimizer to solve high-dimensional numerical optimization. Engineering Applications of Artificial Intelligence, 68, 63-80.
17. Awad, N. H., Ali, M. Z., Mallipeddi, R., & Suganthan, P. N. (2018). An improved differential evolution algorithm using efficient adapted surrogate model for numerical optimization. Information Sciences, 451, 326-347.
18. Al-Bahrani, L. T., & Patra, J. C. (2018). A novel orthogonal PSO algorithm based on orthogonal diagonalization. Swarm and Evolutionary Computation, 40, 1-23.
19. Torabi, S., & Safi-Esfahani, F. (2018). Improved raven roosting optimization algorithm (IRRO). Swarm and Evolutionary Computation, 40, 144-154.
20. Tian, D., & Shi, Z. (2018). MPSO: Modified particle swarm optimization and its applications. Swarm and Evolutionary Computation.
21. Chegini, S. N., Bagheri, A., & Najafi, F. (2018). PSOSCASF: A new hybrid PSO based on Sine Cosine Algorithm and Levy flight for solving optimization problems. Applied Soft Computing, 73, 697-726.
22. Zhong, F., Li, H., Zhong, S. 2017. "An improved artificial bee colony algorithm with modified-neighborhood-based update operator and independent-inheriting-search strategy for global optimization", Engineering Applications of Artificial Intelligence, 58, 134-156.
23. Ouyang, H. B., Gao, L. Q., Li, S., Kong, X. Y., Wang, Q., Zou, D. X. 2017. "Improved harmony search algorithm: LHS", Applied Soft Computing, 53, 133-167.
24. Harfouchi, F., Habbi, H., Ozturk, C., & Karaboga, D. (2017). Modified multiple search cooperative foraging strategy for improved artificial bee colony optimization with robustness analysis. Soft Computing, 1-24.
25. Awad, N. H., Ali, M. Z., Suganthan, P. N., & Reynolds, R. G. (2017). CADE: a hybridization of cultural algorithm and differential evolution for numerical optimization. Information Sciences, 378, 215-241.
26. Mortazavi, A., Toğan, V., & Nuhoğlu, A. (2018). Interactive search algorithm: a new hybrid metaheuristic optimization algorithm. Engineering Applications of Artificial Intelligence, 71, 275-292.

27. Ewees, A. A., Elaziz, M. A., & Houssein, E. H. (2018). Improved grasshopper optimization algorithm using opposition-based learning. *Expert Systems with Applications*, 112, 156-172.
28. Arora, S., & Singh, S. (2019). Butterfly optimization algorithm: a novel approach for global optimization. *Soft Computing*, 23(3), 715-734.
29. Civicioglu, P., Besdok, E., Gunen, M. A., & Atasever, U. H. (2018). Weighted differential evolution algorithm for numerical function optimization: a comparative study with cuckoo search, artificial bee colony, adaptive differential evolution, and backtracking search optimization algorithms. *Neural Computing and Applications*, 1-15.
30. Derrac, J., García, S., Molina, D., & Herrera, F. 2011. "A practical tutorial on the use of nonparametric statistical tests as a methodology for comparing evolutionary and swarm intelligence algorithms". *Swarm and Evolutionary Computation*, 1, (1), 3-18.
31. Martin, L., Leblanc, R., & Toan, N. K. 1993. "Tables for the Friedman rank test". *Canadian journal of statistics*, 21, 1, 39-43.
32. Heidari, A. A., Mirjalili, S., Faris, H., Aljarah, I., Mafarja, M., & Chen, H. (2019). Harris hawks optimization: Algorithm and applications. *Future Generation Computer Systems*, 97, 849-872.
33. W. Zhao, L. Wang and Z. Zhang, Atom search optimization and its application to solve a hydrogeologic parameter estimation problem, *Knowledge-Based Systems* (2019), 163, 283-304.
34. Mohamed, A. W., & Mohamed, A. K. (2019). Adaptive guided differential evolution algorithm with novel mutation for numerical optimization. *International Journal of Machine Learning and Cybernetics*, 10(2), 253-277.
35. Yadav, A. (2019). AEFA: Artificial electric field algorithm for global optimization. *Swarm and Evolutionary Computation*.
36. Tang, D., Liu, Z., Yang, J., & Zhao, J. (2018). Memetic frog leaping algorithm for global optimization. *Soft Computing*, 1-29.
37. Chen, X., & Xu, B. (2018, June). Teaching-learning-based artificial bee colony. In *International Conference on Swarm Intelligence* (pp. 166-178). Springer, Cham.
38. Wang, G. G. (2018). Moth search algorithm: a bio-inspired metaheuristic algorithm for global optimization problems. *Memetic Computing*, 10, 151-164.
39. Pierezan, J., & Coelho, L. D. S. (2018, July). Coyote optimization algorithm: a new metaheuristic for global optimization problems. In *2018 IEEE Congress on Evolutionary Computation (CEC)* (pp. 1-8). IEEE.
40. Mirjalili, S., Gandomi, A. H., Mirjalili, S. Z., Saremi, S., Faris, H., & Mirjalili, S. M. (2017). Salp Swarm Algorithm: A bio-inspired optimizer for engineering design problems. *Advances in Engineering Software*, 114, 163-191.
41. Mirjalili, S., & Gandomi, A. H. (2017). Chaotic gravitational constants for the gravitational search algorithm. *Applied soft computing*, 53, 407-419.
42. Abedinpourshotorban, H., Shamsuddin, S. M., Beheshti, Z., & Jawawi, D. N. (2016). Electromagnetic field optimization: A physics-inspired metaheuristic optimization algorithm. *Swarm and Evolutionary Computation*, 26, 8-22.
43. Punnnathanam, V., & Kotecha, P. (2016). Yin-Yang-pair Optimization: A novel lightweight optimization algorithm. *Engineering Applications of Artificial Intelligence*, 54, 62-79.
44. Mittal, H., Pal, R., Kulhari, A., & Saraswat, M. (2016, August). Chaotic kbest gravitational search algorithm (ckgsa). In *2016 Ninth International Conference on Contemporary Computing (IC3)* (pp. 1-6). IEEE.
45. Askarzadeh, A. (2016). A novel metaheuristic method for solving constrained engineering optimization problems: crow search algorithm. *Computers & Structures*, 169, 1-12.
46. Mirjalili, S., & Lewis, A. (2016). The whale optimization algorithm. *Advances in Engineering Software*, 95, 51-67.
47. Mirjalili, S. (2016). SCA: a sine cosine algorithm for solving optimization problems. *Knowledge-Based Systems*, 96, 120-133.
48. Salimi, H. (2015). Stochastic fractal search: a powerful metaheuristic algorithm. *Knowledge-Based Systems*, 75, 1-18.
49. Shareef, H., Ibrahim, A. A., & Mutlag, A. H. (2015). Lightning search algorithm. *Applied Soft Computing*, 36, 315-333.
50. Mirjalili, S. (2015). Moth-flame optimization algorithm: A novel nature-inspired heuristic paradigm. *Knowledge-Based Systems*, 89, 228-249.
51. Cheng, Min-Yuan, and Doddy Prayogo. "Symbiotic organisms search: a new metaheuristic optimization algorithm." *Computers & Structures* 139 (2014): 98-112.
52. Rashedi, E., Nezamabadi-Pour, H., & Saryazdi, S. (2009). GSA: a gravitational search algorithm. *Information sciences*, 179(13), 2232-2248.

53. Karaboga, D., & Akay, B. (2009). A comparative study of artificial bee colony algorithm. *Applied mathematics and computation*, 214(1), 108-132.
54. Poli, R., Kennedy, J., & Blackwell, T. (2007). Particle swarm optimization. *Swarm intelligence*, 1(1), 33-57.
55. Storn, R., & Price, K. (1997). Differential evolution—a simple and efficient heuristic for global optimization over continuous spaces. *Journal of global optimization*, 11(4), 341-359.
56. Liang, J. J., Qu, B. Y., & Suganthan, P. N. (2013). Problem definitions and evaluation criteria for the CEC 2014 special session and competition on single objective real-parameter numerical optimization. Computational Intelligence Laboratory, Zhengzhou University, Zhengzhou China and Technical Report, Nanyang Technological University, Singapore.
57. N. H. Awad, M. Z. Ali, J. J. Liang, B. Y. Qu and P. N. Suganthan, "Problem Definitions and Evaluation Criteria for the CEC 2017 Special Session and Competition on Single Objective Bound Constrained Real-Parameter Numerical Optimization," Technical Report, Nanyang Technological University, Singapore, November 2016.
58. Long, W., Wu, T., Liang, X., Xu, S.: Solving high-dimensional global optimization problems using an improved sine cosine algorithm. *Expert systems with applications* 123, 108-126 (2019).
59. Lin, X., Zhang, F., Xu, L.: Design of Gear Reducer Based on FOA Optimization Algorithm. In *International Conference on Smart Vehicular Technology, Transportation, Communication and Applications*, pp. 240-247. Springer, Cham (2017).
60. Dong, M., Wang, N., Cheng, X., Jiang, C.: Composite differential evolution with modified oracle penalty method for constrained optimization problems. *Mathematical problems in engineering*, 1-15 (2014), <http://dx.doi.org/10.1155/2014/617905>.
61. Amir M.: Towards An Approach For Effectively Using Intuition In Large-Scale Decision-Making Problems, PhD Thesis, University of Debrecen (2013).
62. Kahraman, H. T., Aras, S., Guvenc, U., & Sonmez, Y. (2017, October). Exploring the effect of distribution methods on meta-heuristic searching process. In *2017 International Conference on Computer Science and Engineering (UBMK)* (pp. 371-376). IEEE.
63. Sun, W., Lin, A., Yu, H., Liang, Q., & Wu, G. (2017). All-dimension neighborhood based particle swarm optimization with randomly selected neighbors. *Information Sciences*, 405, 141 – 156.
64. Tu, Q., Chen, X., & Liu, X. (2019). Multi-strategy ensemble grey wolf optimizer and its application to feature selection. *Applied Soft Computing*, 76, 16-30.
65. Tian, M., & Gao, X. (2019). Differential evolution with neighborhood-based adaptive evolution mechanism for numerical optimization. *Information Sciences*, 478, 422-448.
66. Draa, A., Chettah, K., & Talbi, H. (2018). A Compound Sinusoidal Differential Evolution algorithm for continuous optimization. *Swarm and Evolutionary Computation*.
67. Gülcan, H. (2018). Yusufçuk algoritmasının brownian hareketi ile iyileştirilmesi (Yüksek Lisans Tezi, Mersin Üniversitesi Fen Bilimleri Enstitüsü).
68. Chechkin, A.V., Metzler, R., Klafter, J. and Gonchar, V.Y., 2008, *Anomalous Transport: Foundations and Applications*, Klages, R. , Radons, G. , and Sokolov, I. M., John Wiley & Sons, Weinheim, 129-162.
69. Chen, Y. , 2010, Research and simulation on Levy Flight model for DTN, 2010 3rd International Congress on Image and Signal Processing, Yantai, China, 4421- 4423
70. Cheng, Z. ve Savit, R., 1987, Fractal and nonfractal behavior in Levy flights, *Journal of mathematical physics*, 28 (3), 592-597.
71. Brown, C. T., Liebovitch, L. S. ve Glendon, R., 2007, Lévy flights in Dobe Ju'hoansi foraging patterns, *Human Ecology*, 35 (1), 129-138
72. Pavlyukevich, I., 2007, Lévy flights, non-local search and simulated annealing, *Journal of Computational Physics*, 226 (2), 1830-1844.
73. Yang, X.-S. and Deb, S., 2013, Multiobjective cuckoo search for design optimization, *Computers & Operations Research*, 40, 1616-1624.
74. Yang, X.-S., 2010a, Firefly Algorithm, Levy Flights and Global Optimization, Bramer, M., Ellis, R. and Petridis, M. (Eds.), *Research and Development in Intelligent Systems XXVI*, Springer London, 209-218.
75. Heidari, A. A., Pahlavani, P. (2017). An efficient modified grey wolf optimizer with Lévy flight for optimization tasks. *Applied Soft Computing Journal*, 60, 115–134. doi:10.1016/j.asoc.2017.06.044
76. Mirjalili, S. (2016). Dragonfly algorithm: a new meta-heuristic optimization technique for solving single-objective, discrete, and multi-objective problems. *Neural Computing and Applications*, 27(4), 1053–1073. doi:10.1007/s00521- 015-1920-1
77. Lee, C.-Y. and Yao, X., 2001, Evolutionary Algorithms with Adaptive Levy Mutations,. *Proceedings of the 2001 Congress on Evolutionary Computation*, Seoul, South Korea, 568-575.
78. Cigal, T. (2018). Sürekli zamanlı kaotik sistem tabanlı balina optimizasyon algoritmasının geliştirilmesi (Yüksek Lisans Tezi, Fırat Üniversitesi, Fen Bilimleri Enstitüsü).
79. Alatas B., 2010. Chaotic bee colony algorithms for global numerical optimization. *Expert Systems with Applications*, 37(8), 5682-5687.

80. YILDIRIM, G., AYDIN, G., ALLİ, H., & TATAR, Y. Hadoop ile Kaos Temelli FCW Optimizasyon Algoritmasının Analizi An Analysis of Chaos-Based the FCW Optimization Algorithm by Hadoop.
81. Kaya M. Tarım arazisi verimliliği algoritmasının başlangıç popülasyonunun kaotik haritalarla oluşturulması (Yüksek Lisans Tezi, Düzce Üniversitesi Fen Bilimleri Enstitüsü).
82. Alataş, B.,2007. Kaotik haritalı parçacık sürü optimizasyonu algoritmaları geliştirme (Doktora Tezi, Fırat Üniversitesi, Fen Bilimleri Enstitüsü, Elâzığ).
83. Demir, F. B., Tuncer, T., & Kocamaz, A. F. Lojistik-Gauss Harita Tabanlı Yeni Bir Kaotik Sürü Optimizasyon Yöntemi. *Anatolian Science-Bilgisayar Bilimleri Dergisi*, 47-53.
84. Alatas B., Akin E., & Ozer A. B. 2009. Chaos embedded particle swarm optimization algorithms. *Chaos, Solitons & Fractals*, 40(4), 1715-1734.
85. Tan Y. Tan G. Deng S., 2014. Hybrid particle swarm optimization with chaotic search for solving integer and mixed integer programming problems, *Journal of Central University*, Volume 21, Issue 7, 2731-2742
86. Gandomi A. H., Yang X. S., Talatahari S., & Alavi A. H. 2013. Firefly algorithm with chaos. *Communications in Nonlinear Science and Numerical Simulation*, 18(1), 89- 98
87. Kohli M. & Arora S. 2017. Chaotic grey wolf optimization algorithm for constrained optimization problems. *Journal of Computational Design and Engineering*.
88. Alatas B. 2011. Uniform big bang–chaotic big crunch optimization. *Communications in Nonlinear Science and Numerical Simulation*, 16(9), 3696-3703
89. Alatas B. 2010. Chaotic harmony search algorithms. *Applied Mathematics and Computation*, 216(9), 2687-2699.
90. Tanyıldızı E. & Cigal T. 2017. Kaotik Haritalı Balina Optimizasyon Algoritması. *Fırat Üniversitesi Mühendislik Bilimleri Dergisi*, 29(1).
91. Caponetto R., Fortuna L., Fazzino S. & Xibilia, M. G., 2003. Chaotic sequences to improve the performance of evolutionary algorithms. *IEEE transactions on evolutionary computation*, 7(3), 289-304.
92. Stoyanov B., 2014. Pseudo-random Bit Generation Algorithm Based on Chebyshev Polynomial and Tinkerbell Map, *Applied Mathematical Sciences*, Vol. 8, 2014, no. 125, 6205 – 6210.
93. Büyükuysal, M. (2014). Farklı örneklem genişliklerinde normal dağılım testlerinin karşılaştırılması (Doktora Tezi, Bülent Ecevit Üniversitesi Sağlık Bilimleri Enstitüsü).
94. N. Higashi, H. Iba, Particle swarm optimization with gaussian mutation, in: *Swarm Intelligence Symposium, 2003. SIS'03. Proceedings of the 2003 IEEE*, 72–79.
95. Mahi, M., Baykan, Ö. K., Kodaz, H., "A new hybrid method based on Particle Swarm Optimization, Ant Colony Optimization and 3-Opt algorithms for Traveling Salesman Problem", *Applied Soft Computing*, 30, 484–490, (2015).
96. Han, X., Liu, Q., Wang, H., & Wang, L. (2018). Novel fruit fly optimization algorithm with trend search and co-evolution. *Knowledge-Based Systems*, 141, 1-17.
97. W. Gao, S. Liu, L. Huang, A novel artificial bee colony algorithm based modified search equation and orthogonal learning, *IEEE Trans. Cybern.* 43 (3) (2013) 1011–1024.