|  |  |
| --- | --- |
| **Title:** Social Evolutionary Algorithm Inspired by Human Interactions  **Main author:** R. S. Pavithr and Gursaran  **Year:** 2014  **Link:** <https://www.sciencedirect.com/science/article/pii/S0965997813001853> | |
| **Section: Introduction**  **Number of paragraphs: 8** | |
| **Paragraph – 1** | Importance of nature inspired computing is discussed. |
| **Paragraph – 2** | Algorithms inspired by natural phenomena is discussed in bullet points. |
| **Paragraph – 3** | Research in different nature inspired algorithms is discussed. |
| **Paragraph – 4** | Culture algorithms inspired by human interaction and beliefs is discussed. |
| **Paragraph – 5** | Society and civilization algorithm is discussed. |
| **Paragraph – 6** | Outcomes of interaction in nature inspired evolutionary algorithms is discussed. |
| **Paragraph – 7** | Exploration and exploitation of human interaction in a society in evolution algorithm is discussed. |
| **Paragraph – 8** | Introduction to social evolution algorithm is discussed |

|  |  |
| --- | --- |
| **Title:** Soccer League Competition Algorithm  **Main author:** Naser Moosavian, Babak kasaee Roodsari  **Year:** 2014  **Link:** (<http://www.scirp.org/journal/ijis>)  <http://dx.doi.org/10.4326/ijis.2014.41002> | |
| **Section: Introduction**  **Number of paragraphs: 5** | |
| **Paragraph – 1** | Solution for systems of nonlinear equations is discussed.  Methodologies and Algorithms for solving systems of nonlinear equation is discussed. |
| **Paragraph – 2** | Sensitiveness of the convergence and performance characteristics of newton-type methods is discussed. |
| **Paragraph – 3** | Transformation of system of equation to an optimization problem by applying global optimization methods is discussed. |
| **Paragraph – 4** | Introduction of soccer league competition as new meta heuristics algorithm for solving equations is discussed. |
| **Paragraph – 5** | Division of SLC sections is discussed. |

|  |  |
| --- | --- |
| **Title:** Research on an Improved Ant Colony Optimization Algorithm and its Application  **Main author:** Ping Duan, Yong AI  **Year:** 2016  **Link:** http://dx.doi.org/10.14257/ijhit.2016.9.4.20 | |
| **Section: Introduction**  **Number of paragraphs: 3** | |
| **Paragraph – 1** | Importance of Ant colony optimization in combinatorial optimization problems is discussed. |
| **Paragraph – 2** | Shortcomings of Ant colony optimization is discussed.  Some proposed improved ACO algorithm by different researchers is discussed. |
| **Paragraph – 3** | Importance of improved ant colony optimization algorithm. |

|  |  |
| --- | --- |
| **Title:** An Optimization Algorithm Based on Brainstorming Process  **Main author:** Yuhui Shi  **Year: 2011**  **Link:** [http://sci-hub.tw/https://www.igi-global.com/gateway/article/62645](http://sci-hub.tw/https:/www.igi-global.com/gateway/article/62645) | |
| **Section: Introduction**  **Number of paragraphs: 8** | |
| **Paragraph – 1** | Real world applications are discussed. Comparison between single point algorithms and population-based algorithm is discussed. How optimization problems can be solved by evolutionary algorithms is justified. |
| **Paragraph – 2** | Swarm-based intelligence algorithms are discussed. |
| **Paragraph – 3** | Effectiveness of collective behavior of swarm intelligence algorithm for solving optimization problem is discussed. |
| **Paragraph – 4** | Particle swarm optimization is discussed. |
| **Paragraph – 5** | Importance of Mapping functions of population-based algorithms is discussed. |
| **Paragraph – 6** | Introduction to new algorithm “human brain storming algorithm” |
| **Paragraph – 7** | Single vs. population-based aspects are discussed. |
| **Paragraph – 8** | Division of next sections is discussed. |

|  |  |
| --- | --- |
| **Title:** Focus Group: An Optimization Algorithm Inspired by Human Behavior  **Main author:** Edris Fattahi  **Year: 2017-2018**  **Link:** <https://sci-hub.tw/10.1142/S1469026818500025> | |
| **Section: Introduction**  **Number of paragraphs: 9** | |
| **Paragraph – 1** | Importance of meta heuristics algorithm in exponentially growing practical problems is discussed. |
| **Paragraph – 2** | Classification of meta heuristics algorithm is discussed in bullet points. |
| **Paragraph – 3** | Different evolution algorithms are discussed. |
| **Paragraph – 4** | Introduction to swarm-based intelligence and different algorithms based on swarm optimization are discussed. |
| **Paragraph – 5** | Real world applications solved by meta-heuristics algorithms is discussed. |
| **Paragraph – 6** | Based on Free-Lunch theorem step towards new algorithm is justified. |
| **Paragraph – 7** | Inspiration to Focus group optimization algorithm is discussed. |
| **Paragraph – 8** | Division of next sections is discussed. |

|  |  |
| --- | --- |
| **Title:** Particle Swarm Optimization  **Main author:** James Kenned  **Year: 2011**  **Link:** <https://www.cs.tufts.edu/comp/150GA/homeworks/hw3/_reading6%201995%20particle%20swarming.pdf> | |
| **Section: Introduction**  **Number of paragraphs: 9** | |
| **Paragraph – 1** | introduction to optimization of nonlinear functions using particle swarm optimization is discussed. |
| **Paragraph – 2** | Relationship of PSO to swarming theory and evolutionary computation is discussed. |
| **Paragraph – 3** | Performance of particle swarm optimization is discussed. |

|  |  |
| --- | --- |
| **Title:** Teaching–learning-based optimization  **Main author:** R.V. Rao  **Year: 2011**  **Link:** <https://www.researchgate.net/publication/283178269> | |
| **Section: Introduction**  **Number of paragraphs:** | |
| **Paragraph – 1** | optimization method is discussed. |
| **Paragraph – 2** | optimization of mechanical design problems is discussed. |
| **Paragraph – 3** | Nature inspired algorithms for solving optimization problems is discussed. |
| **Paragraph – 4** | Evolutionary optimization techniques are discussed. |
| **Paragraph – 5** | Introduction of “teaching learning-based algorithm” is discussed. |

|  |  |
| --- | --- |
| **Title:** Biogeography-Based Optimization  **Main author:** Dan Simon*,*  **Year: 2008**  **Link:** <https://ieeexplore.ieee.org/document/4475427> | |
| **Section: Introduction**  **Number of paragraphs: 7** | |
| **Paragraph – 1** | History of mathematical models of biogeography is discussed. |
| **Paragraph – 2** | Description of mathematical models of biogeography. |
| **Paragraph – 3** | Explanation of habitat is discussed. |
| **Paragraph – 4** | Approach to new algorithm “biogeography-based algorithm” for solving optimization problem is discussed. |
| **Paragraph – 5** | Comparison of BBO with genetic algorithm and particle swarm optimization algorithm. |
| **Paragraph – 6** | Comparison of BBO with other population-based algorithms based on bench mark functions are discussed. |
| **Paragraph – 7** | Division of next sections is discussed. |