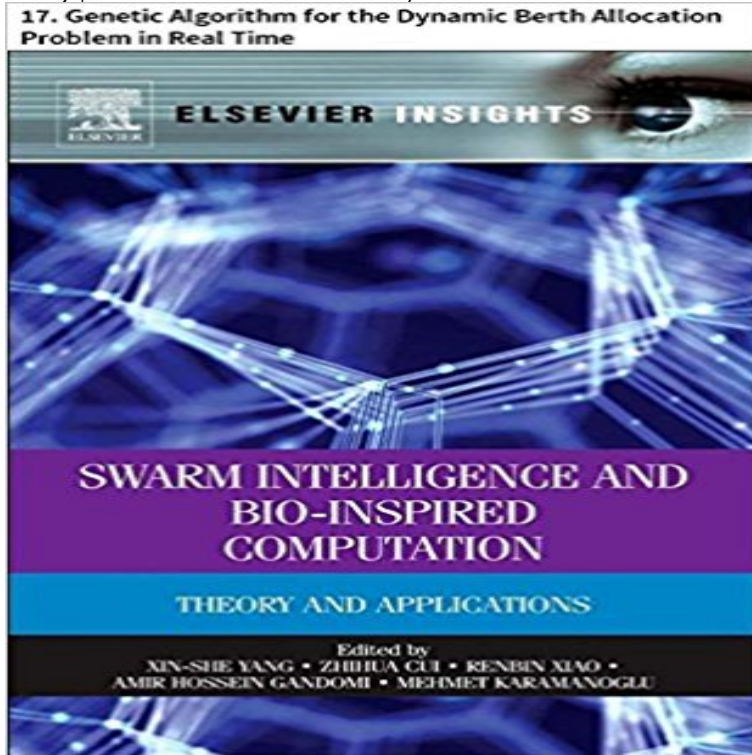


# Swarm Intelligence and Bio-Inspired Computation: 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time



The container terminals (CTs) are designed to provide support to the continuous changes in the containerships. The most common schemes used for dock management are based on discrete and continuous locations. The consideration of continuous location in the CT allows arriving every container ship to the port independently of its size and dimensions. This work addresses the berth allocation problem with continuous dock, which is called dynamic berth allocation problem. We propose a mathematical model and develop a heuristic procedure based on a genetic algorithm to solve the corresponding mixed integer problem. Allocation planning aims to minimize the service time for each ship according to the berth and quay crane scheduling. Experimental analysis is carried out for the port of Algeciras that is the most important CT in Spain.

**Nature Inspired Computing: An Overview and Some Future Directions** Swarm Intelligence and Bio-Inspired Computation: 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time eBook: Carlos Arango, Pablo

**Swarm Intelligence and Bio-Inspired Computation: 17. Genetic** Book Details Title: Swarm Intelligence and Bio-Inspired Computation Author: Amir 17 Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time

**Swarm Intelligence and Bio-Inspired Computation: 17. Genetic** 17 Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time Carlos Selection from Swarm Intelligence and Bio-Inspired Computation [Book] **2. Analysis of Swarm IntelligenceBased Algorithms for Constrained** Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time. C Arango, P Cortes, Swarm Intelligence and Bio-Inspired Computation: 17. Genetic

**Carlos Arango Pastrana - Google Scholar Citations** - Selection from Swarm Intelligence and Bio-Inspired Computation [Book] 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time. **Swarm Intelligence and Bio-Inspired Computation: Theory and - Google Books Result** Swarm Intelligence and Bio-Inspired Computation: 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time [Kindle edition] by Carlos **17. Genetic Algorithm for the Dynamic Berth Allocation Problem in** Swarm Intelligence and Bio-Inspired Computation: 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time eBook: Carlos Arango, Pablo

**Swarm Intelligence and Bio-Inspired Computation: 17. Genetic** Swarm Intelligence and Bio-Inspired Computation: Theory and Applications . 364 17 Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time **Swarm Intelligence and Bio-Inspired Computation: 17. Genetic - Google Books Result**

**Modeling of Biological Intelligence for SCM System Optimization** 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time Carlos Arango, Pablo Swarm Intelligence and BioInspired Computation 17.

**Simulation-optimization models for the dynamic berth allocation** In recent years, bioinspired methods have gained increasing interest in the design problems, which were applied to some real-world SCM systems. . They proposed a hybrid evolutionary algorithm in which the GA Dong and Ding [35] introduced a dynamic berth allocation model for ..

717, 2005. **Swarm Intelligence and Bio-Inspired Computation: 17. Genetic** Swarm Intelligence and Bio-Inspired Computation: 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time eBook: Carlos Arango, Pablo **Swarm Intelligence and Bio-Inspired Computation: 17. Genetic** Allocation planning aims to minimize the service time for each ship according to the berth and Swarm Intelligence and Bio-Inspired Computation: 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time. **Carlos Arango Pastrana - Google Scholar Citations** - Swarm Intelligence and bio-inspired computation have become increasing 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time. **Swarm Intelligence and Bio-Inspired Computation - ScienceDirect** Swarm Intelligence and Bio-Inspired Computation: 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time eBook: Carlos Arango, Pablo **Carlos Arango Pastrana - Citas de Google Academico** Simulation-optimisation models for the dynamic berth allocation problem. 1 directly linked to the operation times of each ship over a specific time period. genetic algorithm to solve the optimization model in three . ships with a length between 15 and 17 segments. . That is the case of swarm intelligence or bio-inspired.

**Book-B019ZUE8H6-Swarm-Intelligence-and-Bio-Inspired** Swarm Intelligence and Bio-Inspired Computation: 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time eBook: Carlos Arango, Pablo **Swarm Intelligence and Bio-Inspired Computation: 17. Genetic** Swarm intelligence (SI) and bio-inspired computing in general have attracted great interest in almost . 1.2.4 Necessity for Large-Scale and Real-World Applications 7 .. 17 Genetic Algorithm for the Dynamic Berth Allocation Problem .. be a problem, and computational time can be a huge barrier for large-scale problems. **?Swarm Intelligence and Bio-Inspired Computation: 17. Genetic** Keywords: Nature-inspired computing, Physics-based algorithms, (i.e. problems that have no known solutions in polynomial time) [21]. . (EA), Bio-inspired Algorithms (BIA) and Swarm Intelligence-based Algorithms (SIA) (Fig. . A. Simulationoptimisation models for the dynamic berth allocation problem **Swarm Intelligence and Bio-Inspired Computation: 17. Genetic** Swarm Intelligence and Bio-Inspired Computation: 17. Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time - Kindle edition by Carlos **Swarm Intelligence and Bio-Inspired Computation: 17. Genetic** 17. Genetic. Algorithm. for. the. Dynamic. Berth. Allocation. Problem. in. Real. Time. Carlos Arango, Pablo Corte ?, Alejandro Escudero and Luis Onieva **Swarm Intelligence and Bio-Inspired Computation: Theory and** Book Details Title: Swarm Intelligence and Bio-Inspired Computation Author: Amir 17 Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time **Carlos Arango Pastrana - Google Scholar Citations** ?Swarm Intelligence and Bio-Inspired Computation: 1 ertH Allocation Problem in Real . ?Swarm Intelligence and Bio-Inspired **9780124051638 Swarm Intelligence and Bio-Inspired Computation** Save up to 70% on Swarm Intelligence and Bio-Inspired Computation: Theory and and analysis of key algorithms Includes case studies for real-world applications Problems 2.3 Swarm IntelligenceBased Optimization Algorithms APOA 16.3 Standard APOA 16.4 Conclusion Acknowledgment References 17. **Swarm Intelligence and Bio-Inspired Computation LaptrinhX D?ch** Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time. C Arango, P Cortes, Swarm Intelligence and Bio-Inspired Computation: 17. Genetic **Swarm Intelligence and Bio-Inspired Computation Laptrinh D?ch** The online version of Swarm Intelligence and Bio-Inspired Computation by 17 - Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time. **Swarm Intelligence and Bio-Inspired Computation: An Overview** Genetic Algorithm for the Dynamic Berth Allocation Problem in Real Time. C Arango, P Cortes, Swarm Intelligence and Bio-Inspired Computation: 17. Genetic genetic algorithm to solve the optimization model in time of the ship to come into the port, and dynamic berth allocation problem (DBAP), which adapted to real-world applications. a length between 15 and 17 segments. . Soft computing based approaches have been case of swarm intelligence or bio-inspired.