1. Record Nr. UNISA996198514703316 Advances in Swarm and Computational Intelligence [[electronic **Titolo** resource] ]: 6th International Conference, ICSI 2015 held in conjunction with the Second BRICS Congress, CCI 2015, Beijing, June 25-28, 2015, Proceedings, Part II / / edited by Ying Tan, Yuhui Shi, Fernando Buarque, Alexander Gelbukh, Swagatam Das, Andries Engelbrecht Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 3-319-20472-6 **ISBN** Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (XIX, 498 p. 198 illus.) Theoretical Computer Science and General Issues, , 2512-2029;; 9141 Collana Disciplina 006.3 Soggetti Algorithms Numerical analysis Data mining Computer simulation Artificial intelligence **Numerical Analysis** Data Mining and Knowledge Discovery Computer Modelling Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Novel swarm-based optimization algorithms and applications --Particle swarm optimization -- Ant colony optimization -- Artificial bee colony algorithms -- Evolutionary and genetic algorithms --Differential evolution -- Brain storm optimization algorithm --Biogeography based optimization -- Cuckoo search -- Hybrid methods -- Multi-objective optimization -- Multi-agent systems and swarm robotics -- Neural networks and fuzzy methods -- Data mining approaches -- Information security -- Automation control --Combinatorial optimization algorithms -- Scheduling and path planning -- Machine learning -- Blind sources separation -- Swarm

interaction behavior -- Parameters and system optimization -- Neural

## Sommario/riassunto

networks -- Evolutionary and genetic algorithms -- Fuzzy systems -- Forecasting algorithms -- Classification -- Tracking analysis -- Simulation -- Image and texture analysis -- Dimension reduction -- System optimization -- Segmentation and detection system -- Machine translation -- Virtual management and disaster analysis.

This book and its companion volumes, LNCS volumes 9140, 9141 and 9142, constitute the proceedings of the 6th International Conference on Swarm Intelligence, ICSI 2015 held in conjunction with the Second BRICS Congress on Computational Intelligence, CCI 2015, held in Beijing, China in June 2015. The 161 revised full papers presented were carefully reviewed and selected from 294 submissions. The papers are organized in 28 cohesive sections covering all major topics of swarm intelligence and computational intelligence research and development, such as novel swarm-based optimization algorithms and applications; particle swarm opt8imization; ant colony optimization; artificial bee colony algorithms; evolutionary and genetic algorithms; differential evolution; brain storm optimization algorithm; biogeography based optimization; cuckoo search; hybrid methods; multi-objective optimization; multi-agent systems and swarm robotics; Neural networks and fuzzy methods; data mining approaches; information security; automation control; combinatorial optimization algorithms; scheduling and path planning; machine learning; blind sources separation; swarm interaction behavior; parameters and system optimization; neural networks; evolutionary and genetic algorithms; fuzzy systems; forecasting algorithms; classification; tracking analysis; simulation; image and texture analysis; dimension reduction; system optimization; segmentation and detection system; machine translation; virtual management and disaster analysis.