Proposed Special Session on Evolutionary Computing Algorithms At

9th International Conference on Soft Computing and Pattern Recognition Marrakech, Morocco. December 11-13, 2017

Introduction and Scope

Nature-inspired algorithms have gained an explicit attention of researchers over the last decade, which is still rapidly growing almost every year. Cellular automata invented in 1940s by John von Neumann & Stanislaw Ulam from Harvard University, motivated around thirty years later, John Holland from the University of Michigan, to create the first evolutionary algorithm. After almost two decades, genetic algorithms boosted into novel models, like Stochastic Diffusion Search invented by a Nobel Laureate in Psychology or Medicine, John Michael Bishop from Harvard University and Particle Swarm Optimization by James Kennedy & Russell Eberhart from Purdue School of Engineering & Technology Indianapolis, USA.

This first Special Session on Evolutionary Computing Algorithms is devoted to promote novel approaches to genetic programming, optimization, clustering, classification or filtering and other application areas of evolutionary algorithms.

Topics of interest include but are not limited to the following:

- o Evaluation strategies of evolutionary methodologies
- o Statistical approaches to swarm intelligence
- o Combinatorial optimization nature-inspired algorithms
- o Distributed evolutionary intelligent systems
- o Uncertainty in intelligent decision making
- Fuzzy logic in evolutionary computation
- o Multi-agent bio-inspired systems
- o Evolutionary game theory
- Comparative approaches to evolutionary algorithms
- o Evolutionary algorithms for inverse problems

Special Session Chairs

Chair: Jolanta Mizera-Pietraszko, Opole University, Poland

Co-Chair: Layth Sliman, Engineering School of Information Science & Technology, EFREI,

Paris, France

Co-Chair: Janusz Kacprzyk, Polish Academy of Sciences, Poland

Information contact: Jolanta Mizera-Pietraszko at jmizera@math.uni.opole.pl