

evoapplications*

**25th European Conference
on the Applications of Evolutionary
and bio-inspired Computation**

part of **evo* 2022**

www.evostar.org

20–22 April 2022

evoapps*

special session on

Applications of Nature-inspired Computing for Sustainability and Development

The Sustainable Development (SD) concept is increasingly becoming of paramount importance at a global level. In 2015, the United Nations (UN) organization indicated a list of 17 SD goals which encompass a variety of fundamental challenges such as, among the others, renewable energies adoption, management of water and other natural resources, healthcare and education quality, gender equality, sustainable agriculture, waste minimization, resilient urban development, industrial innovation and risk management. Since then, SD has evolved to include any social, economic and environmental aspect related to human development.

Recent technologies, which are now finding their place in our every-day life, have played a major role in achieving, also partially, some of such SD goals. This is the case of e.g. Information and Communication Technologies (ICTs), which have been key to the development of smart cities, smart power grids, e-Learning, tele-medicine, search-and-rescue robots, etc. Notably, the most successful implementations of the aforementioned systems make use of notions and ideas from the Computational Intelligence field, including evolutionary computation approaches and other nature-inspired techniques due to their wide applicability scope and flexibility in modeling highly complex real-world scenarios.

In this light, the literature is starting to be populated with applications of nature-inspired techniques to deal with impactful SD scenarios. Some examples are: wind farm layout optimization, optimal use of land, land-mine detection, optimal design of water distribution networks, optimal power flow in smart grids, AI-driven decision support systems for diagnosis in medicine, green scheduling problems, supply chain optimization tools, etc.

This special session aims at gathering the recent state-of-the-art where nature-inspired methods are used to tackle, directly or indirectly, one or more SD goals (<https://sdgs.un.org/goals>).

Contributions are not limited, but strongly encouraged, to applications of nature-inspired techniques regarding the following topics of interest:

- * Any of the UN sustainable development goals
- * Precision Agriculture & Remote Sensing with CI
- * FinTech
- * Intelligent and safe transportation
- * Smart cities
- * Smart grid
- * Renewable energies
- * Expert systems for tele-medicine
- * Technology-enhanced education
- * Green scheduling problems
- * Decision Making / Consensus Modelling in Social Networks
- * Opinion Evolution

Organizers

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More info at:

<http://www.evostar.org/2022/evoapps/anicsd>