## evoapplications\*

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

eurogp\*

25th European Conference on Genetic Programming

part of **evo \* 2022** www.evostar.org

20-22 April 2022

evoapps\* + eurogp\*
special joint track on



This joint track on Evolutionary Machine Learning (EML) will provide a specialized forum of discussion and exchange of information for researchers interested in exploring approaches that combine nature and nurture, with the longterm goal of evolving Artificial Intelligence (AI).

In response to the growing interest in the area, and consequent advances of the state-of-the-art, the special session covers theoretical and practical advances on the combination of Evolutionary Computation (EC) and Machine Learning (ML) techniques.

Topics of interest include, but are not limited to:

- \* EC as an ML technique: Using EC to solve typical ML tasks such as Classification or Clustering
- ★ EC applied ML algorithms: Neuroevolution, Feature Selection, Feature Engineering, Evolutionary Adversarial Models
- \* ML applied to EC: Surrogate-model design by ML for EC, Learning Problem Structure, ML for Diversity, Designing Search Strategies, Predicting Promising Regions, Using ML to Decrease Computational Effort
- \* Real world applications issues: EC for Fairness,
  Robustness, Trustworthiness and Explainability;
  Green EML
- \* Emerging topics: EC for AutoML; EC for Transfer Learning; EC for Multitask Learning; Evolving Learning Functions, Neurons and Linkage; EC for Verification and Validation of ML

## **Submission Details**

Accepted papers will be published by Springer Nature in the Lecture Notes in Computer Science series. Submissions must be original and not published elsewhere. They will be peer reviewed by at least three members of the program committee. The reviewing process will be double-blind, so please omit information about the authors in the submitted paper. Submit your manuscript in Springer LNCS format and provide up to five keywords in your Abstract.

As a joint **eurogp** \* + **evoapps** \* track, authors should decide whether their paper will be treated within **evoapps** \* or **eurogp** \* by selecting the corresponding submission link below. Both conferences are ranked CORE B.

Page limit: 16 pages

**Submission deadline:** 1 November 2021

## **Organizers**

Penousal Machado, University of Coimbra (PT) Wolfgang Banzhaf, Michigan State University (USA)

More info at: http://www.evostar.org/2022/eml/