

**evoapplications\***

**26th European Conference  
on the Applications of Evolutionary  
and bio-inspired Computation**

part of **evo\* 2023**  
[www.evostar.org](http://www.evostar.org)

Brno, Czech Republic  
12 – 14 April 2023

**eurogp\***

**26th European Conference  
on Genetic Programming**

**evoapps\* + eurogp\***  
special joint track on

# Evolutionary Machine Learning

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 long-term 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 deadline:** 1 November 2021

#### **Organizers**

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

More info at:  
[www.evostar.org/2023/eml](http://www.evostar.org/2023/eml)