

# 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

# evoapps\* special session on **Resilient Bio-Inspired Algorithms**

The Special Session on Resilient Bio-Inspired Algorithms (RBA) of **evoapps\*** will provide a specialized forum of discussion and exchange of information for researchers interested in exploring bio-inspired approaches (swarm intelligence, evolutionary computing) to attain resilient systems and processes.

Resiliency is a major topic after major disruptions like COVID-19 where many organizations / systems were too brittle to quickly adapt and they simply broke. Designers of bio-inspired techniques should focus on such systems and help in their design and/or operation, in order to make them more adaptable and capable of withstanding such disruptions. This is for example the case of many organization/industrial processes that work as goal-oriented complex systems, often using AI tools.

It is not uncommon that AI-enhanced complex projects face difficulties due to maintenance issues, scalability problems, or disrupted operation in the presence of major external disturbances. Resilience is thus not only a desired property of the system to which AI is applied, but also a sought property for AI methods themselves.

Topics of interest include, but are not limited to:

- \* Resilience and fault-tolerance in computational intelligence
- \* Resilience on AI engineering using bio-inspired computing
- \* Resilience on hyper-automation including evolutionary machine learning, evolutionary machine vision, and evolutionary robotics.
- \* Resilience on complex systems
- \* Resilience on evolutionary software engineering
- \* Real-world situations where robustness and trustworthiness of solutions are mandatory
- \* Emerging topics not traditionally discussed within the swarm and evolutionary computation where resiliency is of significant applicability

**Submission deadline:** 1 November 2022

#### Organizers

Carlos Cotta, Universidad de Málaga (ES)  
Gustavo Olague, CICESE (MX)

More info at:

[www.evostar.org/2023/evoapps/rba](http://www.evostar.org/2023/evoapps/rba)