evoapplications*

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

part of **evo* 2022**
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evoapps*
special session on

Resilient Bio-Inspired Algorithms

evo* 2022

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

Organizers
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More info at:
http://www.evostar.org/2022/evoapps/rba