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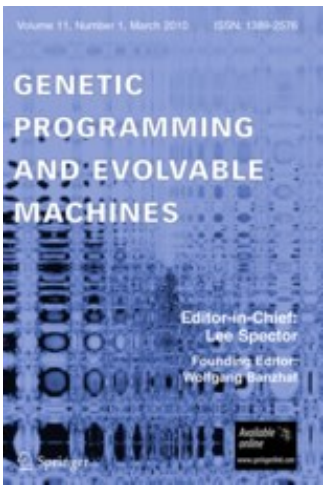

ISSN: 1389-2576 (print)
1573-7632 (electronic)

~Call for Papers~

Special Issue on

Genetic Programming, Evolutionary Computation and Visualization

Guest Editor(s):
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Evelyne Lutton
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Recent advances in Genetic Programming / Evolutionary Computation (GP/EC) and visualization have shown a growing synergy between these fields. On the one hand, visualization can make GP/EC algorithms more transparent, through interactive parameter tuning and the graphical representation of experimental analyses [3,5]. On the other hand, GP/EC techniques can be deployed to efficiently guide user search in exploratory visualization systems [1,2,4].

This special issue aims to bring together latest work and new advances in Genetic Programming / Evolutionary Computation (GP/EC) and Visualization (including its three subfields: information visualization, scientific visualization, and visual analytics), to produce new insight on:

- how to develop better visualization tools to support GP/EC, and
- how to develop robust GP/EC algorithms to support visualization applications.

Scope:

We invite submissions on any aspect of Genetic Programming and Evolutionary Computation (GP/EC) linked to visualization (information visualization, scientific visualization or visual analytics), or visualization applied to GP/EC, including, but not limited to: theoretical results, algorithmic design, evaluations and user studies, surveys, and interesting new applications (e.g. in life sciences, art, and engineering). Suggested topics include, but are not limited to:

- Interactive evolution systems
- GP/EC applied to visual design
- Use of GP/EC in visual analytics or progressive visualization
- Review of visualization techniques in GP/EC
- Review of GP/EC techniques in visualization
- Visualization techniques to explain GP/EC to end users
- Visual analysis of GP/EC algorithms
- Evaluation of (interactive) evolutionary systems
- Visualization of results of experimental analysis of GP/EC algorithms
- Interactive parameter tuning of GP/EC
- Visualization of the search space and the fitness landscape
- Techniques to avoid user fatigue in interactive GP/EC
- Human factors in GP/EC

All inquiries should be sent to Nadia Boukhelifa at: nadia.boukhelifa@inra.fr. Manuscripts should conform to the standard format stipulated in Genetic Programming and Evolvable Machines' Information for Authors. All submissions will be peer reviewed subject to the standards of the journal.

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Choose " Genetic Programming, Evolutionary Computation and Visualization" as the article type when submitting.

References:

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