

November 24, 2018

Av. Sete de Setembro, 3165 - Rebouas CEP 80230-901 Curitiba, PR Phone: (55) 41 99604 3349 Email: oroski@utfpr.edu.br

JAESER

Dear Mr Editor,

Dear Mr Editor,

The submitted article proposes a new heuristic algorithm, the Anthropic Principle Algorithm (APA). This is an original contribution which had its functionality proved and compared to some well-established algorithms, such as GA (Genetic Algorithm) and PSO (Particle Swarm Optimization). In many applications, APA presented better results than the ones presented by PSO or by a classic GA, proving that it has a great potential for application in optimization problems.

Between the article's contributions one can find:

- A new heuristic algorithm based on universe evolution;
- An application of the proposed algorithm in 7 different minimization problems, considering high dimension and multimodal equations;
- An application of the heuristic optimization process in System Identification area;
- A comparison between the main heuristic algorithms as GA and PSO.

The experiments were carried out on Mac with 2.2 GHz Intel Processor and 4.0 GB RAM. All the codes were written and executed in Matlab R2013. The operating system was Mac OS Lion. If it is considered necessary, the employed Matlab code can be made available.

Without further, I hope to start a long and productive partnership with JAESER.

Regards

Elder Oroski