Special Issue for Recent Patents on Computer Science

“Hybrid Heuristics for Software Engineering Problems”

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Aims & Scope:

Several heuristic tools have evolved in the past decades that facilitate solving optimization problems that were previously difficult or impossible to solve. These tools include Evolutionary computation, Simulated annealing, Tabu search, Genetic Algorithms, Differential Evolution, Particle Swarms, Ant Colony, Memetic Computing, Bacterial Foraging, Artificial Bees, and so forth. Developing solutions with these tools offers two major advantages: (1) development time is much shorter than when using more traditional approaches, and (2) the systems are very robust, being relatively insensitive to noisy and/or missing data. The primary objective is to provide a good understanding of the design issues involved in tailoring hybrid heuristic algorithms to solve Software Engineering optimization problems. As software-intensive systems become more and more complex, more intelligent approaches are needed to solve several challenging problems in this domain. The main focus of this special issue is the application of heuristic approaches for software engineering problems.

Topics Covered in this Special issue: We call for high quality, up-to-date contributions in the broad field of Hybrid Heuristics. All submitted papers will be peer-reviewed and selected on the basis of quality and relevance to the special issue.

Topics include, but are not limited to, the following:

- Software Cost Estimation
- Software Defect Prediction
- Software Vulnerability Prediction
- Application Categorization
- Maintainability Prediction
- Quality Prediction
- Software Effort Estimation
- Software Fault Prediction
- Software Testing
- Software Product Line Engineering
- Software Reliability Analysis
- Requirements Engineering
- Software Project Planning And Scheduling
- Software Redundancy
- Signal Processing
- Pattern Recognition
- Machine Learning
- Image Processing
- Computer Vision
- Data Mining
- Text Mining
- Adhoc Networks
- Cloud Computing
- Big Data Analytics
- Computational Intelligence
- Artificial Neural Networks
- Fuzzy Systems
- Deep Learning

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