Call for Papers

12th Metaheuristics International Conference (MIC 2017)
July 4-7, 2017, Barcelona, Spain

Special session: Metaheuristics in Cloud Computing

- Selected works will be invited to a special issue in a high impact journal -

Session chairs: Leonard Heilig, Eduardo Lalla-Ruiz, Stefan Voß,
Institute of Information Systems, University of Hamburg, Germany

Link: http://mic2017.upf.edu/special-sessions/

The cloud computing paradigm is increasingly becoming mainstream and a growing number of companies and research organizations seek to gain value from its unique characteristics, service models, and deployment forms. This gives rise to many different optimization problems both from the consumers' and providers' perspective.

Cloud service providers (CSPs) aim to reduce operational expenses and improve economies of scale to maximize profits and provide competitive prices in a highly competitive market. Therefore, CSPs are particularly concerned with a cost-effective, energy-efficient, fault-tolerant utilization and management of physical and virtual computing resources and services, whereby quality of service (QoS) requirements of consumers have to be satisfied. From the consumers' point of view, particularly an efficient selection and utilization of cloud providers and cloud services as well as the management thereof is of interest. Several requirements in terms of costs and service quality as well as legal constraints need to be taken into account. This involves also specific characteristics of cloud computing, such as the options of scalability, load-balancing, and replication. Some of those consumers may also act as a provider of software applications hosted in a third-party cloud by using cloud infrastructure and platform services. In the context of this ecosystem, the role of cloud broker schemes has been intensively discussed, in particular with regard to decision support. That is, a cloud broker (e.g., in form of decision support or a third-party) can

interact between consumers and providers as well as between consumers to increase the value creation.

We invite high quality papers either on the use of metaheuristics for solving related optimization problems or the application and assessment of metaheuristics within cloud environments for solving well-known optimization problems. Topics of interests include but are not limited to:

- Optimization of cloud-related problems (e.g., resource allocation, scheduling, redundancy allocation)
- Metaheuristics for energy management, data management, security, and reliability
- Metaheuristics for cloud brokerage
- Application of metaheuristics in cloud environments
- Application of metaheuristics to support decision making in different domains (e.g., logistics, smart cities, etc.)
- Design and development of cloud-based decision support systems

Important Dates

Submission: January 23, 2017
Notification: February 27, 2017
Camera-ready: March 6, 2017
Registration: March 31, 2017
Conference: July 4-7th, 2017