ANTS 2016

Tenth International Conference on
Swarm Intelligence

September 7–9, 2016. Brussels, Belgium

Call for papers prepared on November 14, 2015. Version: v003
Up-to-date information at `http://iridia.ulb.ac.be/ants2016`

Scope of the Conference

Swarm intelligence is the discipline that deals with the study of self-organizing processes both in nature and in artificial systems. Researchers in ethology and animal behavior have proposed a number of models to explain interesting aspects of social insect behavior such as self-organization and shape-formation. Recently, algorithms and methods inspired by these models have been proposed to solve difficult problems in many domains.

An example of a particularly successful research direction in swarm intelligence is **ant colony optimization**, the main focus of which is on discrete optimization problems. Ant colony optimization has been applied successfully to a large number of difficult discrete optimization problems including the traveling salesman problem, the quadratic assignment problem, scheduling, vehicle routing, etc., as well as to routing in telecommunication networks. Another interesting approach is that of **particle swarm optimization**, that mainly focuses on continuous optimization problems. Here too, a number of successful applications can be found in the recent literature. **Swarm robotics** is another relevant field. Here, the focus is on applying swarm intelligence techniques to the control of large groups of cooperating autonomous robots.

ANTS 2016 will give researchers in swarm intelligence the opportunity to meet, to present their latest research, and to discuss current developments and applications. The three-day conference will be held in Brussels, Belgium, on September 7–9, 2016.

Relevant Research Areas

ANTS 2016 solicits contributions dealing with any aspect of swarm intelligence. Typical, but not exclusive, topics of interest are:

- Behavioral models of social insects or other animal societies that can stimulate new algorithmic approaches.

- Empirical and theoretical research in swarm intelligence.

- Application of swarm intelligence methods, such as ant colony optimization or particle swarm optimization, to real-world problems.

- Theoretical and experimental research in swarm robotics systems.

Publication Details

Conference proceedings will be published by Springer in the LNCS series. The journal *Swarm Intelligence* will publish a special issue dedicated to ANTS 2016 that will contain extended versions of the best research works presented at the conference. Further details will soon be published on the web site.

Conference Location

Auditorium R42.4.502, Solvay Brussels School of Economics and Management, Campus du Solbosch, Université Libre de Bruxelles, Av. F.D. Roosevelt 42, 1050 Brussels, Belgium.

Best Paper Award

A best paper award will be presented at the conference.

Further Information

Up-to-date information will be published at `http://iridia.ulb.ac.be/ants2016/`. For information about local arrangements, registration forms, etc., please refer to the above-mentioned web site or contact the local organizers at the address below.

Conference Address

IRIDIA CP 194/6	Tel +32-2-650 27 29
Université Libre de Bruxelles	Fax +32-2-650 27 15
Av. F. D. Roosevelt 50	http://iridia.ulb.ac.be/ants2016
1050 Bruxelles, Belgium	email: ants@iridia.ulb.ac.be

Important Dates

Submission deadline	March 2, 2016
Notification of acceptance	May 4, 2016
Camera ready copy	May 18, 2016
Conference	September 7–9, 2016

ANTS 2016 Organizing Committee

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