



## CIST 2019

### Special Session on Collective Intelligence for Science and Technology

at the 11<sup>th</sup> International Conference on Computational Collective Intelligence (ICCCI 2019)

Hendaye, France, September 4-6, 2019

Conference website: <http://iccci.sigappfr.org>

#### Special Session Organizers

**Prof. Habiba Drias**

Department of Computer Science  
Laboratory of Research in Artificial Intelligence  
USTHB, Algiers, Algeria  
E-mail: [hdrias@usthb.dz](mailto:hdrias@usthb.dz)

**Prof. Sadok Ben Yahia**

Department of Software Science  
Tallinn University of Technology, Estonia  
E-mail: [sadok.ben@taltech.ee](mailto:sadok.ben@taltech.ee)

**Prof. Abdellatif El-Afia**

University Mohammed V in Rabat  
ENSIAS, Morocco  
E-mail: [a.elafia@um5s.net.ma](mailto:a.elafia@um5s.net.ma)

**Prof. Nadjet Kamel**

Department of Computer Science  
University Ferhat Abbas Setif 1, Algeria  
E-mail: [nkamel@univ-setif.dz](mailto:nkamel@univ-setif.dz)

#### Objectives and topics

Collective intelligence has been widely investigated these last decades. Several significant theoretical developments and computational tools have been established and the field of computational collective intelligence is still in an increasing growth. An important number of paradigms such as swarm intelligence and multi-agents' technology have emerged with the aim to tackle complex issues. Exploring methods based on collective intelligence for science and technology could bring enhancements for research and industry not only for solutions effectiveness and efficiency but also for scalability, which is a real big challenge. The CIST 2019 Special Session at the 11<sup>th</sup> International Conference on Computational Collective Intelligence (ICCCI 2019) deals with the investigation of intelligent approaches based on collective intelligence such as meta-heuristics, evolutionary approaches and multi-agent systems aiming at addressing one of the large spectrum of science and technology applications. CIST 2019 is seeking research papers on recent advances, but is not limited to the following topics:

- **Collective Intelligence Computing**
  - Swarm intelligence
  - Traditional bio-inspired algorithms (ACO, BSO, PSO, ...)
  - New Nature-inspired algorithms (Bat Algorithm, Harmony Search, Firefly Algorithm, Elephant Herding Algorithm, ...)
  - Metaheuristics and hybrid evolutionary algorithms
  - Cultural Algorithms
  - Multi-agents systems
  - Autonomous agents
  - Integration of culture and consciousness in cognitive agents

- **Applications**

- Datamining (data preprocessing, machine learning, clustering, association rules mining, ...)
- Data warehousing
- Information retrieval
- Robots (robot tasks optimization, integration of culture, consciousness, ...)
- Social networks
- Bioinformatics, bio-technology, environmental sciences, climatology ...
- Blockchain (smart contract, data authentication, ...)
- IoT (smart home, smart city, Modern transportation...)
- Numeric function optimization
- Industry (entertainment industry, ...)
- Health domain
- Web applications (web security, web search, ...)

## Important dates

Submission of papers: **April 15, 2019 (Extended-Strict)**

Notification of acceptance: **May 20, 2019**

Camera-ready papers: **June 1, 2019**

Registration & payment: **June 1, 2019**

Conference date: **September 4-6, 2019**

## Program Committee (to be invited)

Sadok Ben Yahia	University of Tunis, Tunisia
Raddouane Chiheb	University Mohammed V in Rabat – ENSIAS, Morocco
Habiba Drias	USTHB, Algeria
Abdelatif El Afia	University Mohammed V in Rabat – ENSIAS, Morocco
Fatima Ghedjati	University of Reims Champagne-Ardenne, France
Maria Gini	University of Minnesota, USA
Salima Hassas	Lyon 2 University, France
Francisco Herrera	University of Granada, Spain
Imed Kacem	University of Lorraine, France
Nadjet Kamel	University Ferhat Abbas Sétif 1, Algeria
Saroj Kaushik	Indian Institute of Technology Delhi, India
Samir Kechid	USTHB, Algeria
Ilyes Khennak	USTHB, Algeria
Ana Maria Madureira	Polytechnic of Porto, Portugal
Brahim Medjahed	University of Michigan, USA
Madjid Merabti	Liverpool John Moores University, UK
Farid Meziane	University of Salford, UK
Erich J Neuhold	Wien University, Austria
Mourad Oussalah	Nantes University, France
Houari Sahraoui	University of Montreal, Canada
Lakhdar Sais	University of Artois, France
Giusepi Vizzari	Milano-Bicocca University, Italy
Djaafar Zouache	UBBA, Algeria

## Submission

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EasyChair. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track **CIST 2019: Special Session on Collective Intelligence for Science and Technology**.

<https://easychair.org/conferences/?conf=iccci2019>

Authors are invited to submit original previously unpublished research papers written in English, of up to 12 pages, strictly following the LNCS/LNAI format guidelines. Authors can download the Latex (recommended) or Word templates available at [Springer's web site](#). Submissions not following the format guidelines will be rejected without review. To ensure high quality, all papers will be thoroughly reviewed by the **CIST 2019 Program Committee**. All accepted papers must be presented by one of the authors who must register for the conference and pay the fee. The conference proceedings will be published by Springer in the prestigious series LNCS/LNAI (indexed by ISI CPCI-S, included in ISI Web of Science, EI, ACM Digital Library, dblp, Google Scholar, Scopus, etc.). Authors of accepted and presented high quality papers will be invited to submit an extended and improved version to be included in a **special issue of the Journal of Intelligent Systems** (<https://www.degruyter.com/view/j/jisys>).