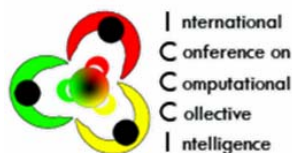# ICCCI 2011

3rd International Conference on
Computational Collective Intelligence – Technologies and Applications

21-23 September 2011, Gdynia, Poland

http://iccci2011.am.gdynia.pl

Computational Collective Intelligence (CCI) is most often understood as an AI sub-field dealing with soft computing methods which enable making group decisions or processing knowledge among autonomous units acting in distributed environments. Web-based systems, social networks and multi-agent systems very often need these tools for working out consistent knowledge states, resolving conflicts and making decisions. The aim of this conference is to provide an internationally respected forum for scientific research in the computer-based methods of collective intelligence and their applications in (but not limited to) such fields as semantic web, social networks and multi-agent systems.

ICCCI 2011 is organized by Gdynia Maritime University and Wroclaw University of Technology in Poland. Gdynia Maritime University in which it will take place is located in the port city Gdynia known for its picturesque seashore with marinas, promenades and yacht clubs. However there is more to enjoy nearby, as Gdynia is a part of the Tricity, which also includes a thousand-year-old Gdańsk, Poland's cultural gem, and Sopot, a health-resort with its beautiful Landscape Park and splendid sandy beaches. The many attractions of the area are easily reached via *Gdansk Lech Walesa International Airport*, and all three cities are linked by frequent and comfortable commuter lines. Gdynia Maritime University is a specialized technical university and the largest Polish and European Centre for higher maritime education. The University is actively involved in numerous national and European research projects.

SCOPE OF ICCCI 2011

Methodological, theoretical and practical aspects of *computational collective intelligence* such as group decision making, collective action coordination, knowledge integration, understood as the form of intelligence that emerges from the collaboration and competition of many individuals (artificial and/or natural).The application of multiple computational intelligence technologies such as fuzzy systems, evolutionary computation, neural systems, consensus theory, etc., to support human and other collective intelligence and creation of new forms of CCI in natural and/or artificial systems. Three subfields of application of computational intelligence technologies to support various forms of collective intelligence are of special attention but are not the only ones: semantic web (as an advanced tool increasing collective intelligence), social network analysis (as the field targeted to the emergence of new forms of CCI), and multiagent systems (as a computational and modeling paradigm especially tailored to capture the nature of CCI emergence in populations of autonomous individuals).

TOPICS OF INTEREST

We welcome all submissions in the subjects of CCI related (but not limited) to the following topics:

- Agent Theory and Application
- Automated Reasoning
- Cognitive Modeling of Agent Systems
- Collective Intelligence
- Computational Biology
- Computer Vision
- Computational Intelligence
- Computational Security
- Cooperative Systems and Control
- Cybernetics for Informatics
- Data Mining for Social Networks
- Distributed Intelligence
- Evolutionary computing
- Fuzzy Systems
- Grey Theory
- Hybrid Systems
- Information Retrieval and Integration
- Information Hiding
- Intelligent Architectures
- Intelligent Applications
- Intelligent Building
- Intelligent Control
- Intelligent e-learning/tutoring
- Intelligent Image Processing
- Intelligent Networks
- Intelligent Transportation Systems
- Knowledge Representation
- Knowledge-Based Systems
- Logic in Intelligence
- Machine Learning
- Mobile Intelligence
- Natural Language Processing
- Optimization and Swarm Intelligence
- Pattern Recognition
- Probabilistic and Uncertain Reasoning
- Semantic Web
- Smart Living Technology
- Smart Sensor Networks
- Soft computing
- Social Networks
- Ubiquitous computing and its applications
- Web Intelligence and Interaction

SUBMISSION INFORMATION

Contribution papers from prospective authors with interest to the related topics are invited to submit to ICCCI 2011 for **oral or poster presentations**. All submissions should follow the **LNCS/LNAI (Springer) format** with titles, author names, affiliation, email addresses, and up to 150-words abstract. The manuscript should be written in English and should not exceed 10 pages. The submissions should present the results of original research or innovative practical applications relevant to topics. Practical experiences with state-of-the-art in CCI methodologies are also acceptable to reflect lessons of unique value for the conference attendees. All papers must provide at most five key words including one or more of the topics as listed above. All papers will be reviewed by peers.

IMPORTANT DATES	
Special Session proposal:	15 Feb 2011
Submission of papers:	15 Mar 2011
Notification of acceptance:	30 Apr 2011
Final papers to be received:	15 May 2011
Conference:	21-23 Sep 2011

The conference proceedings will be **published in Lecture Notes in Computer Science/Artificial Intelligence series** by Springer-Verlag and indexed by EI, ISI(CPCI-S), Scopus, DBLP, ACM Digital Library. Referees will be asked to nominate papers for a **Best Paper award** to be announced at the conference. All personally presented papers, but particularly those nominated for the Best Paper competition will be automatically considered for publication in the **extended versions** in several special issues for **ISI, SCI journals**.

HONORARY CHAIRS
Pierre Lévy, University of Ottawa, Canada
Roman Słowiński, Poznan University of Technology, Poland

GENERAL CHAIRS
Piotr Jędrzejowicz, Gdynia Maritime University, Poland
Ngoc Thanh Nguyen, Wroclaw University of Technology, Poland

STEERING COMMITTEE CHAIR
Ngoc Thanh Nguyen, Wroclaw University of Technology, Poland

PROGRAM CHAIRS
Ireneusz Czarnowski, Gdynia Maritime University, Poland
Jason J. Jung, Yeungnam University, Korea
Ryszard Kowalczyk, Swinburne University of Technology, Australia
Kazumi Nakamatsu, University of Hyogo, Japan

ORGANIZING CHAIRS
Dariusz Barbucha, Gdynia Maritime University, Poland
Radosław Katarzyniak, Wroclaw University of Technology, Poland

SPECIAL SESSION CHAIRS
Amine Chohra, Paris-East University, France
Tokuro Matsuo, Yamagata University, Japan
Ewa Ratajczak-Ropel, Gdynia Maritime University, Poland

PUBLICITY CHAIR
Izabela Wierzbowska, Gdynia Maritime University, Poland

DOCTORAL TRACK CHAIR
Bogdan Trawiński, Wroclaw University of Technology, Poland