

ABSim&CA

Agent-Based Simulation & Cellular Automata

First International Workshop @ ACRI 2014

Kraków (Poland), September 22, 2014

<http://www.acri2014.agh.edu.pl/doku.php?id=absim>

Chairs

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Aims and scope

Agent based approaches to the simulation of complex systems are nowadays very popular in different fields including urban planning, biology, social sciences just to mention some significant example. In many cases, models resulting from these research efforts include a representation of the environment in which agents are situated that is often characterized by a cellular structure, with a clear similarity to Cellular Automata models. On the other hand, the latter are characterized by a formal definition much more precisely constrained than agent based models. Sometimes, however, the application of CA models to specific simulations of complex systems pushes modelers to relax some of the basic CA model constraints. This situation hinders the possibility to systematically compare and evaluate alternative approaches and, more generally, makes more difficult the communication and sharing of experiences, approaches and results. The aim of this workshop is to bring together researchers interested in clarifying the relationships between these approaches, bringing together experiences and insights both in terms of clarifications on the theoretical and formal differences and similarities among the approaches but also on the feedbacks from applications in different research areas that can represent a more pragmatic contribution.

The workshop is addressed to both researchers active in the CA modeling and simulation application area but also researchers analyzing fundamental aspects of CA models and the boundaries set by the formal constraints of the model. In addition to researchers traditionally already attending CA related events, this workshop can also attract researchers from disciplines like urban planning, biology, social sciences that are interested in having a deeper understanding of the models they employ sometimes on daily basis.

Program Committee

- Vincent Chevrier, Université de Lorraine, France
- Jan Dijkstra, Eindhoven University of Technology, Netherlands
- Alexis Drogoul, IRD, France
- Guy Engelen, Flemish Institute for Technological Research, Belgium
- Nazim Fatès, LORIA - INRIA Nancy, France
- Andreas Pyka, Universität Hohenheim, Germany
- Andrea Roli, Alma Mater Studiorum - Università di Bologna, Italy
- Paul Torrens, University of Maryland, College Park, USA
- Mirko Viroli, Alma Mater Studiorum - Università di Bologna, Italy
- Jarosław Wąs, Department of Applied Computer Science, AGH, Poland
- Roger White, Memorial University of Newfoundland, Canada

Submission and publication

Authors are invited to submit papers according to two contribution categories -- full and short papers -- meant to provide a differentiation of the papers in terms of their length, depth and/or maturity. Papers must comply with the Springer-Verlag format and the maximum length of 5 and 10 pages for short and full contributions, respectively.

Every paper will be reviewed by two members of a Programme Committee that will include researchers active in CA and agent-based modeling and simulation researches, but also researchers from other disciplines like social sciences and economics, urban planning, biology.

Details on the electronic submission procedure will be provided through the website <http://acri2014.agh.edu.pl>

Accepted papers will be published by Springer-Verlag in the Lecture Notes in Computer Science (LNCS) series.

Selected papers will be considered for publication in a Special issue of an international journal. They will contain refereed extended/improved versions of selected papers presented at the ABSim&CA Workshop.

IMPORTANT DATES:

Paper submission: **April 15, 2014**

Notification of paper acceptance or rejection: **May 14, 2014**

Final version of the paper for the proceedings: **June 8, 2014**

Workshop contact person:

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