

SIMUL 2012

Forward

The Fourth International Conference on Advances in System Simulation (SIMUL 2012), held on October November 18-23, 2012 in Lisbon, Portugal, continued a series of events focusing on advances in simulation techniques and systems providing new simulation capabilities.

While different simulation events are already scheduled for years, SIMUL 2012 identified specific needs for ontology of models, mechanisms, and methodologies in order to make easy an appropriate tool selection. With the advent of Web Services and WEB 3.0 social simulation and human-in simulations bring new challenging situations along with more classical process simulations and distributed and parallel simulations. An update on the simulation tool considering these new simulation flavors was aimed at, too.

The conference provided a forum where researchers were able to present recent research results and new research problems and directions related to them. The conference sought contributions to stress-out large challenges in scale system simulation and advanced mechanisms and methodologies to deal with them. The accepted papers covered topics on social simulation, transport simulation, simulation tools and platforms, simulation methodologies and models, and distributed simulation.

We welcomed technical papers presenting research and practical results, position papers addressing the pros and cons of specific proposals, such as those being discussed in the standard forums or in industry consortiums, survey papers addressing the key problems and solutions on any of the above topics, short papers on work in progress, and panel proposals.

We take here the opportunity to warmly thank all the members of the SIMUL 2012 technical program committee as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and efforts to contribute to the SIMUL 2012. We truly believe that thanks to all these efforts, the final conference program consists of top quality contributions.

This event could also not have been a reality without the support of many individuals, organizations and sponsors. We also gratefully thank the members of the SIMUL 2012 organizing committee for their help in handling the logistics and for their work that is making this professional meeting a success. We gratefully appreciate to the technical program committee co-chairs that contributed to identify the appropriate groups to submit contributions.

We hope the SIMUL 2012 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in simulation research.

We hope Lisbon provided a pleasant environment during the conference and everyone saved some time for exploring this beautiful city.

SIMUL 2012 Chairs

SIMUL Advisory Chairs

Edward Williams, PMC-Dearborn, USA

Paul Fishwick, University of Florida-Gainesville, USA

Christoph Reinhart, Harvard University - Cambridge, USA

SIMUL 2012 Research Liaison Chairs

Tae-Eog Lee, KAIST, Korea

Marko Jaakola, VTT Technical Research Centre of Finland, Finland

SIMUL 2012 Industry Liaison Chairs

Diglio A. Simoni, RTI International – RTP, USA

Shengnan Wu, American Airlines, USA

Ann Dunkin, Palo Alto Unified School District, USA

Tejas R. Gandhi, Virtua Health-Marlton, USA

SIMUL 2012 Special Area Chairs**Model-based system prediction**

Georgiy Bobashev, RTI International -Research Triangle Park, USA

Aida Omerovic, SINTEF & University of Oslo, Norway

Process simulation

Ian Flood, University of Florida, USA

Gregor Papa, Jozef Stefan Institute - Ljubljana, Slovenia

SIMUL 2012 Publicity Chairs

Nuno Melao, Catholic University of Portugal - Viseu, Portugal