

ANUNCIO DE CONFERENCIA

DEVS Agent-Based Framework for Web-Services Testing

Bernard P. Zeigler

University of Arizona

Arizona Center for Integrative Modeling and Simulation

We present an agent-based framework for testing of collaborative web-services. The framework derives minimal testable I/O pairs from web service behavior specifications. These minimal testable I/O pairs are mapped to test primitives and then automatically synthesized into DEVS test agents and deployed in distributed federations to execute a scenario. We present the theoretical foundations for this work and its application to end-to-end testing of mission threads over the Global Information Grid and its Service Oriented Architecture.

Lunes 4 de diciembre 12 hr.

Sala de Grados
Fac. de Informática
Universidad Complutense de Madrid
c/ Profesor García Santesmases s/n
Ciudad Universitaria. 28040 Madrid
Para más información: jmcruz@dacya.ucm.es

BERNARD P. ZEIGLER



Bernard P. Zeigler is Professor of Electrical and Computer Engineering at the University of Arizona, Tucson and Director of the [Arizona Center for Integrative Modeling and Simulation](#). He is internationally known for his 1976 foundational text [Theory of Modeling and Simulation](#), recently revised for a [second edition](#) (Academic Press, 2000). He has published numerous [books](#) and [research publications](#) on the Discrete Event System Specification (DEVS) formalism. In 1995, he was named Fellow of the IEEE in recognition of his contributions to the theory of discrete event simulation. In 2000 he received the [McLeod Founder's Award](#) by the Society for Computer Simulation, its highest recognition, for his contributions to discrete event simulation. In June 2002, he was elected [President](#) of the Society (recently, renamed [The Society for Modeling and Simulation, International](#).) In 2003, his [autobiographical retrospective](#) on the evolution of the theory of modeling and simulation appeared in the [International Journal of General Systems](#). (Vol. 32 (3)).

Zeigler served on two National Research Council committees to recommend directions for information technology and [simulation modeling in the 21st Century](#) and a third NRC committee that developed a book of recommendations on simulation enhancements to [systems acquisition and manufacturing](#). He has given numerous keynote talks, tutorials and short courses, and organized symposia and conferences that were the first to promote modeling and simulation fundamentals and theory and has been a participant in recent workshops on the [science of simulation](#).

In 2001, with [Hessam Sarjoughian](#) and other faculty, he founded the [Arizona Center for Integrative Modeling and Simulation](#) dedicated to the development of modeling and simulation as a discipline of the future.

Zeigler is currently heading a project for the Joint Interoperability Test Command ([JITC](#)) where he is leading the design of the future architecture for large distributed simulation events for the Joint Distributed Engineering Plant ([JDEP](#)). He is also developing [DEVs-methodology approaches](#) for testing mission thread end-to-end interoperability and combat effectiveness of Defense Department acquisitions and transitions to the Global Information Grid with its Service Oriented Architecture (GIG/SOA). He received the JITC Golden Eagle Award for research and development of the Automated Test Case Generator, 2005 and the Award for Best [M&S Development in the Cross-functional Area](#), 2004/2005, by the National Training Simulation Association, May 2, 2006. He is preparing a [book](#) on the methodology of M&S-based dynamic data engineering to be published by Academic Press (2007).

He was appointed Fellow of the Society for Modeling and Simulation, International (SCS), 2006.