

Alexandre MUZY

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Biography:

Alexandre MUZY received the PhD degree in 2004 at the Università di Corsica – Pasquale Paoli. In 2004, he has been predoctoral research scholar at the Arizona Center of Integrative Modeling and Simulation (ACIMS, University of Arizona, United States of America) directed by Bernard P. ZEIGLER. In 2005, he has been postdoctoral research scholar at the Laboratoire d'Informatique pour la Mécanique et les Sciences de l'Ingénieur (UPR-LIMSI CNRS 3251, University of Paris Sud, Orsay, France). In 2006, he worked with Hans VANGHELUWE, from the McGill University, and with Juan de LARA in the Universidad Autónoma de Madrid. He is currently researcher at the Environmental Systems laboratory (UMR-SPE CNRS 6134, Università di Corsica – Pasquale Paoli, Corsica). In research, he is collaborating with different universities (McGill University, Universidad Autónoma de Madrid, Oak Ridge National Lab (ORNL), University of Arizona, etc.), and he is coordinating the Locus research project.

Research Interests:

His research interests concern the topic of multi-agent modeling and simulation of real world systems, using the Discrete Event System Specification (DEVS) and dynamic structures (DS). His scope is to define an adaptable, multilevel and efficient environment for the modeling and simulation of multiagents. To achieve this goal, an efficient (DS)DEVS simulation core is designed. At a higher level, metamodeling is used to design modifiable domain-specific languages for multiagents, as well as to complete automatic mappings to the simulation core of the environment. Improvements of the environment design are provided through applicative constraints, mainly in economics (fishery and land allocation models), and fire spread simulation.