

Home More ▾



Article

Combining DEVS and model-checking: concepts and tools for integrating simulation and analysis

January 2017 · International Journal of Simulation and Process Modelling 12(1):2

DOI: 10.1504/IJSPM.2017.10003688

Bernard Phillip Zeigler · Chungman Seo · James J. Nutaro

Reads ⓘ

Recommendations

Followers

Citations

5 2 new

0 0 new

0 0 new

5 0 new

[Export citation](#)

Request full-text



Overview

Comments

Citations (5)

References (41)

Related research (10+)

References (41)

Guide to Modeling and Simulation of Systems of Systems

Book Jan 2017

Bernard Phillip Zeigler · Hessam Sarjoughian

9 Reads · 26 Citations

Recommend Follow Share

Request full-text

Timed automata: Semantics, algorithms and tools

Article Jan 2004

Johan Bengtsson · W. Yi

14 Reads · 456 Citations

Recommend Follow Share

Request full-text

Recommend Follow Share

 Hesham Saadawi ·  G. A. Wainer ·  Mohammad Moallemi

2 Reads · 6 Citations

Model Checking for Verification in UAV Cooperative Control Applications

Article Jan 2013 · Lecture Notes in Control and Information Sciences

 Laura R. Humphrey

Recently, there has been an increased interest in verification techniques for complex, autonomous systems. Consider for instance a scenario in which individual autonomous agents must work together to complete a series of constrained tasks. In cases such as this, there is a need for techniques to verify t...




28 Reads · 9 Citations

Recommend Follow Share

Request full-text

Finite Markov Chains

Article Mar 1961 · Journal of the American Statistical Association

 Glen E. Baxter ·  John G. Kemeny ·  J. Laurie Snell

29 Reads · 1822 Citations

Recommend Follow Share

Request full-text

The cell-DEVS formalism as a method for activity tracking in spatial modelling and simulation

Article Full-text available Jan 2015 · International Journal of Simulation and Process Modelling



 G. A. Wainer

The spreading of wildfires in forests is a complex natural phenomenon that depends on many different variables (such as the fuel, the geography of the area, the weather, etc.). We discuss different methods based on DEVS and cell-DEVS, which can be used to speed up the simulation and simplify the modellin...

11 Reads · 5 Citations

An Introduction to Probability Theory and Its Applications

Article Jan 1958 · Journal of the Royal Statistical Society Series A (General)

 D. R. Cox ·  W. Feller





24 Reads · 3262 Citations

Recommend Follow Share

Request full-text

Kripke Modelling and Model Checking of a Multiple UAV System Monitoring Road Network

Conference Paper Aug 2010

 Gopinadh Sirigineedi ·  Antonios Tsourdos ·  Brian White ·  Rafal Zbikowski


This paper presents a verifiable multiple UAV system cooperatively monitoring a road network. The focus is on formal modelling and verification which can guarantee correctness of reactive systems like multi-UAV systems. Kripke modelling is used to formally model the decentralized cooperative control strateg...

7 Reads · 4 Citations

Recommend Follow Share

 Recommend  Follow  Share

Article Jun 1985 · Journal of the Operational Research Society

 Bernard Phillip Zeigler




15 Reads · 538 Citations

Recommend Follow Share

[Request full-text](#)

Complementarity between Simulation and Formal Verification - Transformation of PROMELA Models into FDDEVS Models : Application to a Case Study

Conference Paper Aug 2014

 Aznam Yacoub ·  Maamar Hamri ·  Claudia Frydman

19 Reads · 5 Citations

Recommend Follow Share

[Request full-text](#)

[Show more](#)



 **Recommend**  **Follow**  **Share**