

Activity on: 22 OCT 2017

Collectors: Vorachet Jaroensawas, Thanaphon Chearanai

SysML Titled Papers

Number of papers: 395

Publisher: IEEE

Content Type: Conference Publications Journals & Magazines

Year: 2010-2017

Sort order: Most Cited Count (Descending) Max cited:49 Min cited: 0

Files

- VJ_TP_SysMLTitledPapers_from2010_to2017_SortByMostCited_Set1.html (1 - 100)
- VJ_TP_SysMLTitledPapers_from2010_to2017_SortByMostCited_Set2.html (101 - 200)
- VJ_TP_SysMLTitledPapers_from2010_to2017_SortByMostCited_Set3.html (201 - 300)
- VJ_TP_SysMLTitledPapers_from2010_to2017_SortByMostCited_Set4.html (301 - 395)

Excerpt of the citations in a HTML document

Document Title	Authors	Author Affiliations	Publication Title	Date Added To Xplore	Year	Volume
A SysML-Based Methodology for Manufacturing Machinery Modeling and Design	L. Bassi; C. Secchi; M. Bonfe; C. Fantuzzi	Department of Electronics, Computer Science and Systems, University of Bologna, Italy	IEEE/ASME Transactions on Mechatronics	20110905	2011	1
An MDD process for IEC 61131-based industrial automation systems	K. Thramboulidis; G. Frey	Electrical & Computer Engineering, University of Patras, Greece	ETFA2011	20111024	2011	

Start Page	End Page	Abstract	ISSN	ISBNs	DOI
049	1062	This paper describes a modeling methodology to support the design process of complex systems. The main challenge in modern industrial applications is the sheer volume of data involved in the design process. While using high-level abstraction is necessary to manage this data and analyze the system "as a whole," designers need also to retain all the low-level information of the system, in order to be able to perform optimizations and modifications at later times. The solution proposed here is to use a hierarchy of models, each one describing the system at different levels of abstraction, and arrange them in such a way that it is possible to easily "map" each level onto the others. The topmost layer of the system description is expressed in System Modeling Language, a general-purpose modeling language based on Unified Modeling Language.	1083-4435;10834435		10.1109
1	8	Model Driven Development (MDD) has been proved as a quite successful paradigm in general-purpose computing and is currently exploited in the embedded systems domain. On the other hand, the majority of industrial automation systems is developed based on the IEC 61131 standard. This standard defines a model and a set of programming languages for the development of industrial automation software and it is supported by the majority of the commercial tools in this domain. This work proposes an MDD process to increase the	1946-0740;19460740	Electronic:978-1-4577-0018-7; POD:978-1-4577-0017-0; USB:978-1-4577-0016-3	10.1109