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Titre de la thèse : Annotations sémantiques pour l'interopérabilité des systèmes dans un environnement PLM (Product Lifecycle Management)

L'objectif principal de cette thèse concerne l'étude et la définition d'un cadre pour l'annotation sémantique de modèles afin de gérer, tout au long du cycle de vie d'un produit, l'ensemble des connaissances métier qui interviennent dans sa conception, son exploitation et son recyclage. Plus particulièrement, ce travail de recherche cherche à répondre au besoin d'interopérabilité de connaissances en proposant un cadre de modélisation, une formalisation et des outils pour faciliter l'interopérabilité sémantique dans les systèmes PLM de manière cohérente, complète et contextualisée.

- Publications :

- Yongxin Liao. Semantic annotations for systems interoperability in a PLM environment
Computer Aided Engineering. Université de Lorraine, 2013. English
- Yongxin Liao, Mario Lezoche, Hervé Panetto, Nacer Boudjlida. Semantic annotations for semantic interoperability in a product lifecycle management context
International Journal of Production Research, Taylor & Francis, 2016, In press.
- Yongxin Liao, Eduardo Rocha Loures, Osiris Junior Canciglieri, Hervé Panetto. A novel approach for ontological representation of analytic hierarchy process
Advanced Materials Research, Trans Tech Publications, 2014, 945-949, pp.675-682.
- Yongxin Liao, Mario Lezoche, Hervé Panetto, Nacer Boudjlida. Why, Where and How to use Semantic Annotation for Systems Interoperability
1st UNITE Doctoral Symposium, Jun 2011, Bucarest, Romania. pp.71-78, 2011.

- Yongxin Liao, Mario Lezoche, Hervé Panetto, Nacer Boudjlida. Semantic Annotation Model Definition for Systems Interoperability OTM. *OTM 2011 Workshops 2011 - 6th International Workshop on Enterprise Integration, Interoperability and Networking (EI2N)*, Oct 2011, Hersonissos, Crete, Greece. Springer-Verlag, LNCS 7046, pp.61-70, 2011, Lecture Notes in Computer Science.
- José Marcelo Cestari, Eduardo Rocha Loures, Eduardo Santos, Yongxin Liao, Hervé Panetto *et al.* An overview of attributes characterization for interoperability assessment from the public administration perspective *Third Workshop on Industrial and Business Applications of Semantic Technologies and Knowledge-based information systems, INBAST 2014*, Oct 2014, Amantea, Italy. Springer, Lecture Notes In Computer Sciences, LNCS 8842, pp.329-338, 2014, Lecture Notes in Computer Science.
- Yongxin Liao, Mario Lezoche, Eduardo Rocha Loures, Hervé Panetto, Nacer Boudjlida. Formalization of Semantic Annotation for Systems Interoperability in a PLM environment OTM. *OTM Federated conferences and workshops, 2nd Workshop on Industrial and Business Applications of Semantic Web Technologies (INBAST)*, Sep 2012, Rome, Italy. Springer, LNCS 7567, pp.207-218, 2012, Lecture Notes in Computer Science.
- Yongxin Liao, Mario Lezoche, Eduardo Rocha Loures, Hervé Panetto, Nacer Boudjlida. A semantic annotation framework to assist the knowledge interoperability along a product life cycle. *Advanced Materials Research*, Trans Tech Publications, 2014, 945-949, pp.424-429.
- Yongxin Liao, Mario Lezoche, Hervé Panetto, Nacer Boudjlida, Eduardo Rocha Loures. Formal semantic annotations for models interoperability in a PLM environment. Boje, Edward; Xia, Xiaohua. *19th IFAC World Congress, IFAC'14*, Aug 2014, Cape Town, South Africa. International Federation of Automatic Control, 19 (1), pp.2382-2393, 2014.
- Yongxin Liao, Mario Lezoche, Hervé Panetto, Nacer Boudjlida, Eduardo Rocha Loures. Semantic annotation for knowledge explicitation in a product lifecycle management context : a survey *Computers in Industry*, Elsevier, 2015, 71, pp.24-34
- Yongxin Liao, Mario Lezoche, Eduardo Rocha Loures, Hervé Panetto, Nacer Boudjlida. Semantic enrichment of models to assist knowledge management in a PLM environment. *21st International Conference on Cooperative Information Systems CoopIS 2013*, Sep 2013, Graz, Austria. Springer, LNCS 8185, pp.267-274, 2013, Lecture Notes in Computer Science.

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