Selected applications in cloud-based, service-oriented knowledge sharing, ijcim vol 28-2 (2015)

Y-Y Cheng, H-J Shaw, *Cloud-based, service-oriented and knowledge sharing architecture: its design and application in shipbuilding..*

The SaaS oriented architecture is based on SOA, XML and Web services enables the sharing of ship specification files across heterogeneous ICT systems. PaaS (Platform as a Service) and IaaS (IBM's Infrastructure as a Service) can be considered as SaaS applications.

Intern. Journal of CIM, Vol. 28, Nr. 2, pp 137-154

Contact: 280643@yahoo.com.tw

J. Lee, K. Jung, B.H. Kim, Y. Peng, H. Cho, *Semantic web-based supplier discovery system for building a long-term Supply chain.*

The authors propose an ontology to represent supplier capabilities (manufacturing as well as non-manufacturing) and buyers requirements, reason about supplier potential capabilities and match semantically requirements with capabilities. A prototype has proven its applicability. The UN Standards Products and Service Code (UN/SPSC) and the North America Industry Classification System (NAISC) can be used.

Intern. Journal of CIM, Vol. 28, Nr. 2, pp 155-169

Contact: hcho@postech.ac.kr

S. Ma, L. Tian, *Ontology-based semantic retrieval for mechanical design knowledge.*

Construction of the design knowledge ontology and the adoption of query semantic extensions (based on a similarity analysis to discover semantic distance between semantic keys) provide improved retrieval results. Method capabilities have been demonstrated by experiments.

Intern. Journal of CIM, Vol. 28, Nr. 2, pp 226-238

Contact: msh_1216@yahoo.cn

W. He, L. Xu, *A state of the art survey of cloud manufacturing.*

The authors survey the area of cloud manufacturing, identify research directions and discuss potential opportunities. The résumé: cloud manufacturing has the potential to transform manufacturing industries. But most proposed models and algorithms are still prototypes and still need to be validated in large scale environments.

Intern. Journal of CIM, Vol. 28, Nr. 2, pp 239-250

Contact: whe@odu.edu