Complementarity in Competence Management

Nacer Boudjlida, (Université de Lorraine, LORIA / INRIA Grand Est, France)
Mail: nacer.boudjlida@loria.fr

Nacer Boudjlida (http://www.loria.fr/~nacer) is a full professor at Université de Lorraine (France). As a researcher, he is affiliated with the LORIA Research laboratory (Lorraine Laboratory of Research in Computer Science and Applications). As a professor, his lectures include the various facets of databases (DBMS, database design, distribution, architecture, administration etc.). As a researcher, his domain of interest includes process modelling and support, distributed and cooperative computing, semantic-based mediated architectures. He authored two books on databases and numerous papers on software systems integration and interoperability, on software process modelling and support, etc. He directed many international projects. He is currently the head of the management board of the Scientific Interest Group (Groupement d'Intérêt Scientifique) INTEROP-Grande Région whose central topic is entrepise systems and applications interoperability.

Abstract / Résumé

Retrieving and composing individuals' capabilities are the matter of several research fields, like competence-based management, human resources management, enterprise knowledge management systems, knowledge representation systems, etc. This talk focuses on capability representation, discovery and composition in heterogeneous, and possibly distributed, knowledge representation environments. A driving motivation of this work is to provide a contribution to the satisfaction of the need for retrieving individuals who may carry out actions, as well as the need for retrieving individuals who, when putting their competences together, may carry out actions.

We outline some formal capability description languages, and we propose approaches and algorithms for capability management, discovery and composition. In addition, we outline how our proposals are implemented in a mediator-based prototype system under a service oriented architecture and a Peer-to-Peer architecture.

Keywords / Mots-clés
(EN) Competence Management, Knowledge Representation, Description Logics, Conceptual Graphs, Mediation, Mediator Federation, Capability discovery, Composite Answer. (FR) Gestion de compétences, Représentation de connaissances, Logique de description, Graphes conceptuels, Médiation, Fédération de médiateurs, Découverte de compétences, Réponses composées.