Nazca: A Context-Based Matching Method for Searching Heterogeneous Structures

Authors : Karine B. de Oliveira, Carina F. Dorneles

Abstract : The structure level matching is the problem of combining elements of a structure, which can be represented as entities, classes, XML elements, web forms, and so on. This is a challenge due to large number of distinct representations of semantically similar structures. This paper describes a structure-based matching method applied to search for different representations in data sources, considering the similarity between elements of two structures and the data source context. Using real data sources, we have conducted an experimental study comparing our approach with our baseline implementation and with another important schema matching approach. We demonstrate that our proposal reaches higher precision than the baseline.

Keywords : context, data source, index, matching, search, similarity, structure Conference Title : ICBB 2014 : International Conference on Bioinformatics and Biomedicine Conference Location : Istanbul, Türkiye Conference Dates : May 22-23, 2014

1