

Abstract

Improving Interlinking

Rajan Verma

Master of Science in Computer Science

Supervisor : Dr. Declan O'Sullivan

Assistant Supervisor : Dr. Kevin Chekov Feeney

September, 2014

In the past few years there has been a considerable amount of growth in the Web of Linked Data. A large amount of the information available on the web is in the unstructured form. With the increase in the number of data resources, linking such heterogeneous resources has now become a challenge. Even though, there are many automatic tools available to interlink heterogeneous data sources, the links generated by these approaches are often found not to be precise. Semi-automatic tools have been proven to be more efficient and precise. However, not much attention has been given to the user interface of these tools. People often have found it difficult to use these tools. This dissertation proposes an approach to interlink heterogeneous data sets using a semi-automatic approach. The dissertation also determines how users behave differently to different user interfaces for data-interlinking. An evaluation approach was formulated in order to evaluate the efficiency, effectiveness and accuracy of the implemented system based on the proposed approach. In addition, the evaluation also determines how different user interfaces influence the task of data interlinking in linked data applications.