Abstract

Extracting Events, Time Expressions and Named Entities from Legal text is fundamental aspect for deep language understanding and key to various applications such as Temporal Reasoning in Criminal Documents, Case decisions(Intellectual property and crime) for details, Case Based Reasoning, Ordering of Cases according to their Time lines, Determining
Relevancy between Precedent cases and Current cases, Temporal Question Answering System, Text Summarization and Documents Retrieval according to Events and Times. Our long term intension is to build a system which automatically extracts Events and Time expressions and ordering them in a particular order. Ordering of events become significant task and it is assists to finding all feasible times a given event can occur, all relationships between two given events, finding one or more consistent scenarios and finally representing data in a minimal network form. In this paper, we are focusing about automatic extraction of Quantitative, Qualitative time’s information and from Legal Text Documents, along with this Legal text expressed in natural language can be automatically annotated with semantic mark ups using natural language processing Techniques. Finally applied reasoning among temporal information with the help of extracted information. Reasoning can be done using constraint satisfaction networks by applying Allen's Algebra relations. Apart from this result analysis obtained using Precision and Recall statistical measurements over standard dataset DUC 2005.

Reference

- Michael Tanenblatt, Anni Coden, Igor Sominsky, 2010 the ConceptMapper Approach to Named Entity Recognition, LREC Conference, Malta.
- Chris Biemann, 2009 Unsupervised Parts of speech Tagging in Large Text, Research on Language and Computation, Volume 7,Issue 2-4,USA.

**Index Terms**

Computer Science

Natural Language Processing

**Key words**

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Qualitative time’s Event Extraction

Time Extraction Time Markup

Language (TIMEML)

Event Extraction

Legal text documents

Temporal Reasoning

Semantic Representation