gSemSearch: Entity Relation Search in Text as Graph

Michal Laclavík
laclavík.ui@savba.sk, http://ikt.ui.sav.sk/esns/
Institute of Informatics, Slovak Academy of Science, Dúbravská cesta 9, 845 07 Bratislava, Slovakia

Motivation
To exploit information and knowledge hidden in email communication, documents or on the web

Approach
- Entities extraction like People, Organizations, Locations, Contact data
- Forming semantic trees and graphs or information networks
- User interaction with graph data

Used Technology
- Regular Expressions
- Java Mail
- Lucene

Used Tools
- Ontea
- gSemSearch
- SGDB

Features
- Creating of network of interconnected entities
- Discovering relation in the Graph (network) using spread of activation algorithm
- Showing relations of concrete type, e.g. telephone numbers related to a person
- Navigation over related entities
- Full-text search of the entities
- User interface for search
- User interaction with data (merging, deleting entities) with immediate impact on discovered relations and further information extraction learning
- Created networks have similar properties such as other information networks

Acknowledgment: This work is partially supported by projects VEGA 2/0184/10, VENIS FP7-284984 and APVV D07RP-0020-11.