

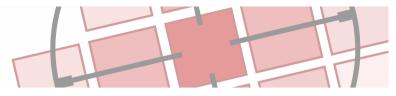


The use of SMT in financial news sentiment analysis

Thomas Dohmen





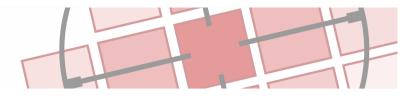


SemLab

- SemLab founded in 2000
- Software applications for:
 - Finance
 - Healthcare
- ViewerPro: semantic analysis platform for financial news (DowJones, Reuters, etc.)
- Newssentiment.eu for financial news sentiment







Research Projects

- SemLab participates in EU and nationally funded r&d projects
- Collaboration with leading research institutes
- Last decade: invested
 5.8 million Euro in research



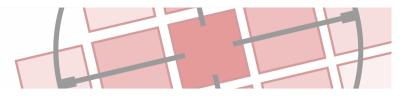






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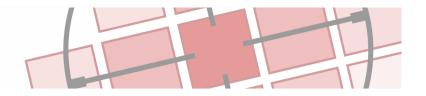


Research Topics

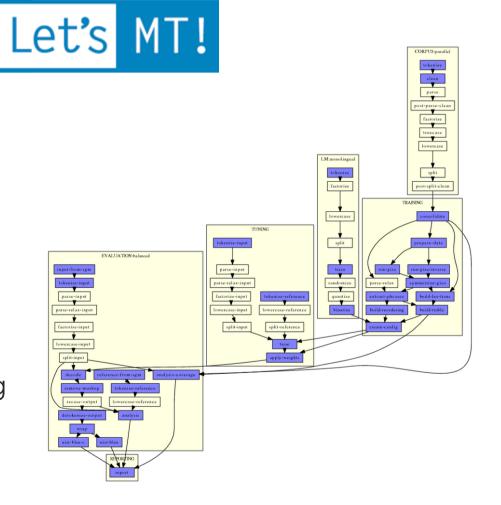
- Semantic analysis technology suitable for wide ranging r&d:
 - Ontology
 - Language
 - Finance Tools
 - Social Media





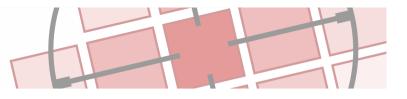


- Statistical Machine Translation (SMT)
- Focus: Small European languages
- Topic-specific translation systems
- E.g. Business and Finance language
- SemLab provides parallel corpora for system training
- Integration into news sentiment website





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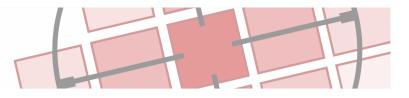


| | Sentiment ^{Beta} ent of all major european equities | 3 hour average of over g financial news sources | SemLab | For real-time data, get a premium account |
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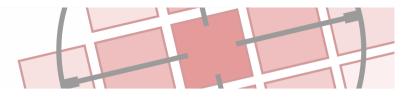


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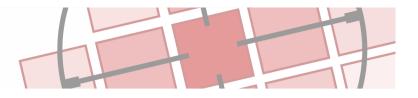


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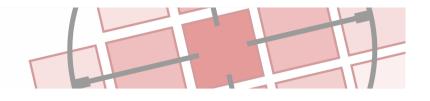


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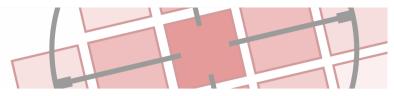


MT

- Using LetsMT engine for translating output
 - Translate news events
- Using LetsMT engine for translating input
 - E.g. Dutch financial news translated into English for semantic analysis
 - Evaluate translation quality from machine readable perspective





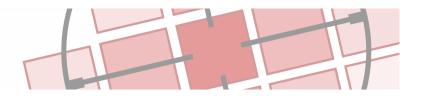


MT Standards

- Standard API
 - Easy integration of MT system
 - Current Standards (e.g. Google API) too basic
 - Not rich enough for domain-specific MT
- Data Collecting standards
 - Webcrawling: web polluted with bad MT data
 - Need for markup to distinct MT from human translations
- General translation standard
 - Accessibility
 - Quality assurance







Questions?

