Empowering web portal users with personalized text mining services

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**Literature Mining and Curation**

- Reading, interpreting, curating bio-literature
- Labor-intensive, error-prone and expensive task
- → Natural Language Processing (NLP) techniques:
  - ✓ extract knowledge from papers
  - Semantic techniques:
    - ✓ connect information from various sources

**Web Platform**

- Personalized view and results of semantic analysis
  - Content processing with indexers, summarizers, named entity extractors, etc.
  - User-defined display of results (map, index, highlighting in the source text, etc.)

**System Architecture**

- Domain Ontology
- Resource Metadata
- User Model
- Personalization Rules
- Personalizable NLP-Results Portlet
- Personalizable Content Portlet
- Semantic Assistants Framework
- Intraspective Views

**Introspective Views**

- Rich-interaction visualization of semantic user models
- Follows Ben Shneiderman’s information seeking mantra
- Overview first, zoom and filter, then details-on-demand
- Intuitive mechanisms for editing user models
- Direct propagation of model changes on the content

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