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KHRESMOI
www.khresmoi.eu

Final KHRESMOI web site

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Abstract

This deliverable presents the version of the Khresmoi website at the end of the project. It highlights important features of the website, and presents the sustainability plan for the website. The Khresmoi webpage will be maintained in its final state and with its current URL for at least 5 years after the project end.

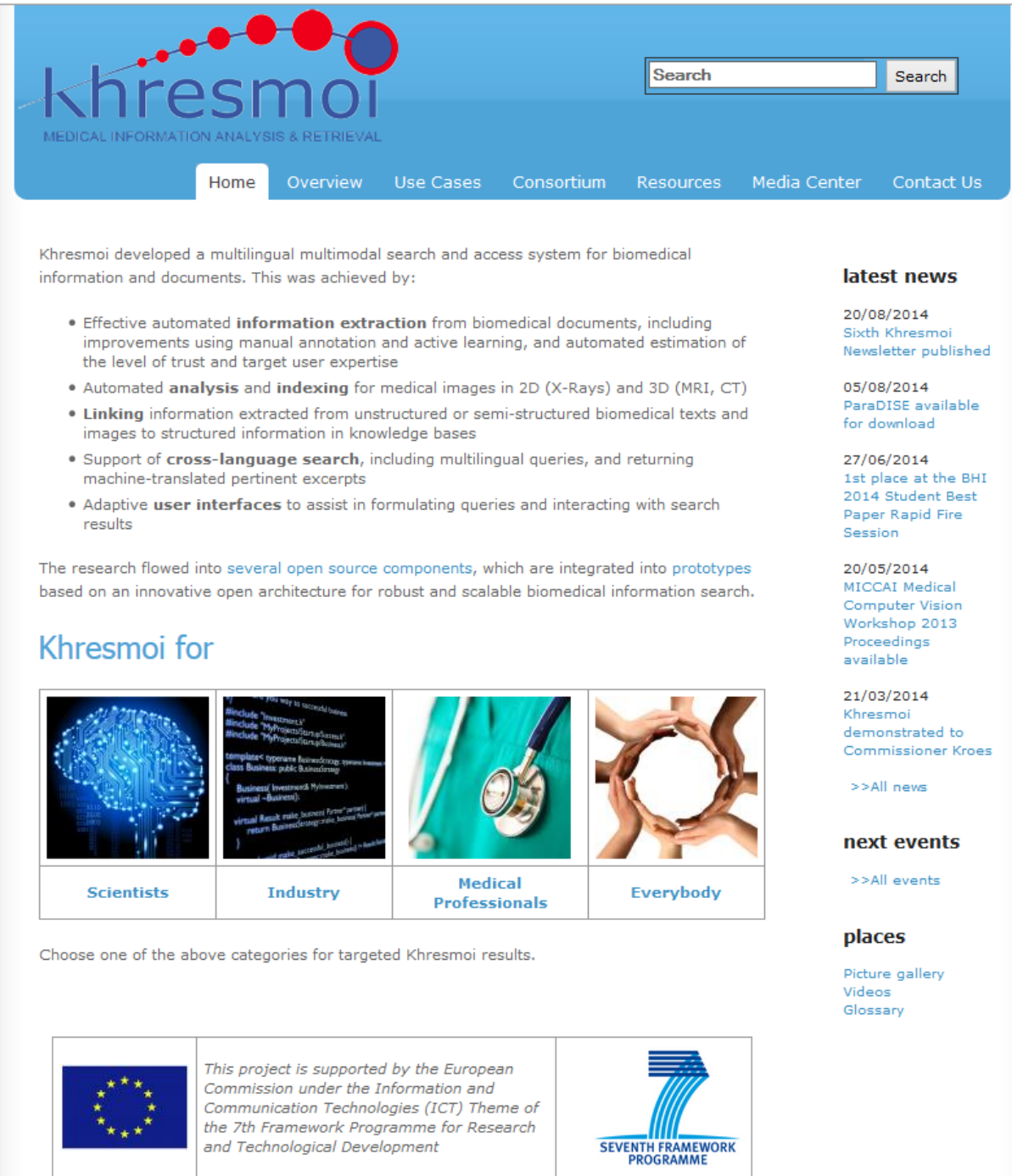
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1 The Khresmoi Website

The Khresmoi Website is accessible at: <http://khresmoi.eu>

A screenshot of the entry page on the 22nd of August 2014 is shown below:



khresmoi
MEDICAL INFORMATION ANALYSIS & RETRIEVAL

Search Search





Home Overview Use Cases Consortium Resources Media Center Contact Us

Khresmoi developed a multilingual multimodal search and access system for biomedical information and documents. This was achieved by:



- Effective automated **information extraction** from biomedical documents, including improvements using manual annotation and active learning, and automated estimation of the level of trust and target user expertise
- Automated **analysis** and **indexing** for medical images in 2D (X-Rays) and 3D (MRI, CT)
- **Linking** information extracted from unstructured or semi-structured biomedical texts and images to structured information in knowledge bases
- Support of **cross-language search**, including multilingual queries, and returning machine-translated pertinent excerpts
- Adaptive **user interfaces** to assist in formulating queries and interacting with search results

The research flowed into **several open source components**, which are integrated into **prototypes** based on an innovative open architecture for robust and scalable biomedical information search.

Khresmoi for

			
Scientists	Industry	Medical Professionals	Everybody

Choose one of the above categories for targeted Khresmoi results.

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latest news

20/08/2014
Sixth Khresmoi Newsletter published

05/08/2014
ParaDISE available for download

27/06/2014
1st place at the BHI 2014 Student Best Paper Rapid Fire Session

20/05/2014
MICCAI Medical Computer Vision Workshop 2013 Proceedings available

21/03/2014
Khresmoi demonstrated to Commissioner Kroes

>>All news

next events

>>All events

places

Picture gallery
Videos
Glossary

2 Important Features

2.1 Target groups

On the entry page to the website (shown on the previous page), four large images invite the visitor to select the target group that they feel part of. This takes them to a page that presents information that may interest them in a structured way. In particular, the deliverables are grouped by theme and hence it is easier to locate the deliverables of interest.

As an example, the *Khresmoi for Scientists* page is shown, in the version of the 22nd of August 2014:



khresmoi
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Overview » Khresmoi for Scientists

Khresmoi for Scientists

This page provides links to information of interest to scientists, both computer scientists and scientists from other disciplines, who may wish to use the results to assist in their work.



General Information

- Read the [information folders and newsletters](#).
- Join the discussion on the [Khresmoi LinkedIn Group](#).
- Follow Khresmoi on [Twitter](#).

Prototypes

Khresmoi for Everyone: A search engine aimed at easing medical information search for the broadest group of end users: <http://everyone.khresmoi.eu>

Khresmoi Professional: A search engine providing professional search features for medical professionals.

- **Desktop version:** Select to use either the web interface or the Swing application, where the Swing application will install an app locally: <http://professional.khresmoi.eu>
- **Android mobile version:** Install it from the [Google Play Store](#).

The desktop prototypes of Khresmoi for Everyone and Khresmoi Professional are described in [Deliverable 8.5.2](#). The mobile prototypes are described in [Deliverable 8.4](#).

Khresmoi Radiology: A search engine with advanced image search capabilities for radiologists. Watch the videos showing the prototypes for 3D image search and 2D image search. It is described in [Deliverable 9.4.2](#).

Software

Khresmoi is producing software for text analysis, semantic search, medical image analysis and search, search interfaces, machine translation and knowledge bases. See the [software page](#) for links to this software, and links to Khresmoi Deliverables giving technical details of its use in Khresmoi.

Data sets

See the [data sets page](#). A list of language and evaluation resources produced in the Khresmoi project is in [Deliverable 6.2](#).

overview

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2.2 Resources

The *Resources* page provides links to all resources developed in the Khresmoi project, including the open source software, the datasets, the deliverables, the publications and the prototypes. All publications are placed on the Bibsonomy citation management website (<http://www.bibsonomy.org>) with the tag *khresmoi-project*. The Khresmoi website publications page generates the list of publications at display time by querying Bibsonomy with this tag.

The *Software* and *Data Sets* pages are shown below in the version of the 22nd of August 2014:

Resources » Software

Software

Members of Khresmoi are actively developing the following software. It is being integrated into the full Khresmoi system, but individual software components are available:

- **GATE** (General Architecture for Text Engineering) - GATE provides the text annotation and classification framework.
 - More information on its use in Khresmoi is available in [Deliverable 1.2](#) and [Deliverable 1.7](#).
 - Evaluation results are in [Deliverable 1.3](#) and [Deliverable 1.8](#).
- **Mimir** (Multiparadigm Indexing and Retrieval) - Mimir provides the semantic indexing and search framework.
 - The use of Mimir in Khresmoi is described in [Deliverable 1.7](#).
- **ezDL** (Easy Access to Digital Libraries) - ezDL provides a comprehensive interface for searching.
 - More information on ezDL, especially on its extensions for supporting translation, is available in [Deliverable 3.1](#).
 - Evaluation results are in [Deliverable 3.2](#) and [Deliverable 3.7](#).
 - The definitive description is in [Deliverable 3.6](#).
 - Adaptations of the interface for the visually impaired are in [Deliverable 3.5](#).
- **OWLIM** - OWLIM provides the semantic repository for the Khresmoi knowledge base.
 - More information on its use in Khresmoi is available in [Deliverable 5.1](#).
 - Evaluation results are in [Deliverable 5.3](#) and [Deliverable 5.6](#).
- **ParaDISE** (Parallel Distributed Image Search Engine) - ParaDISE is the image retrieval engine used for 2D images.
 - The parts of [Deliverable 2.6](#) related to "2D article images" describe ParaDISE.

Resources » Data Sets

Data Sets

The following datasets have been created in Khresmoi, and are available for further use. More information is available in [Deliverable 6.2](#).

Annotated Radiology Images

Within the VISCERAL project, 3D radiology images have been manually annotated and will be released to the research community by April 2015. Watch the [VISCERAL website](#) for more details.

Multilingual Corpora from the Medical Domain

- Khresmoi Query Translation Test Data for the Medical Domain version 1.0
- Khresmoi Summary Translation Test Data version 1.1

Evaluation of Information Retrieval in the Medical Domain

- CLEF eHealth 2013 Task 3 Evaluation Package (available through the [ELRA catalogue](#))
- CLEF eHealth 2014 Task 3 Evaluation Package (will be available after September 2014)

3 Sustainability of the Website

The Khresmoi webpage will be maintained in its final state and with its current URL for at least 5 years after the project end by HES-SO.

The text on the website has been converted to the past tense where this was necessary. The website is not yet in its final state at the end of August 2014 when this deliverable is submitted. Once the final deliverables have been submitted at the end of August, the target group pages will have a final update to include these deliverables. Some resources also remain to be added to the relevant lists once their locations are finalised.

Over the longer term, the news section on the website will continue to be updated by the TUW with news of follow-up activities using Khresmoi outcomes.