

Research Topics in Information Retrieval

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Information Retrieval

"Information retrieval (IR) is finding material (usually documents) of an unstructured nature (usually text) that satisfies an information need from within large collections (usually stored on computers)."

Definition from Manning, Christopher D., Prabhakar Raghavan, and Hinrich Schütze. Introduction to information retrieval. Vol. 1. Cambridge: Cambridge university press, 2008.

Ongoing projects

Dendro^B My Find Search Dendro Submit João Rocha

dcb / Base Data Share

Folder
 Selection

Up to dcb
 Dados_DCB_Madeira.xls

Information Change log
 Copy from parent Clear

Description
 B I H Preview
 Describes experimental and numerical studies on double cantilever beam test applied to fracture characterization of wood in mode I. A new data reduction scheme based on the beam theory and specimen compliance is proposed in order to overcome the difficulties inherent to crack monitoring during propagation. A cohesive damage model adapted to wood is used to simulate the test. The cohesive properties are evaluated using an inverse method based on a developed

Title
 Dados_Dcb_Madeira / A new data reduction scheme for mode I wood fracturt

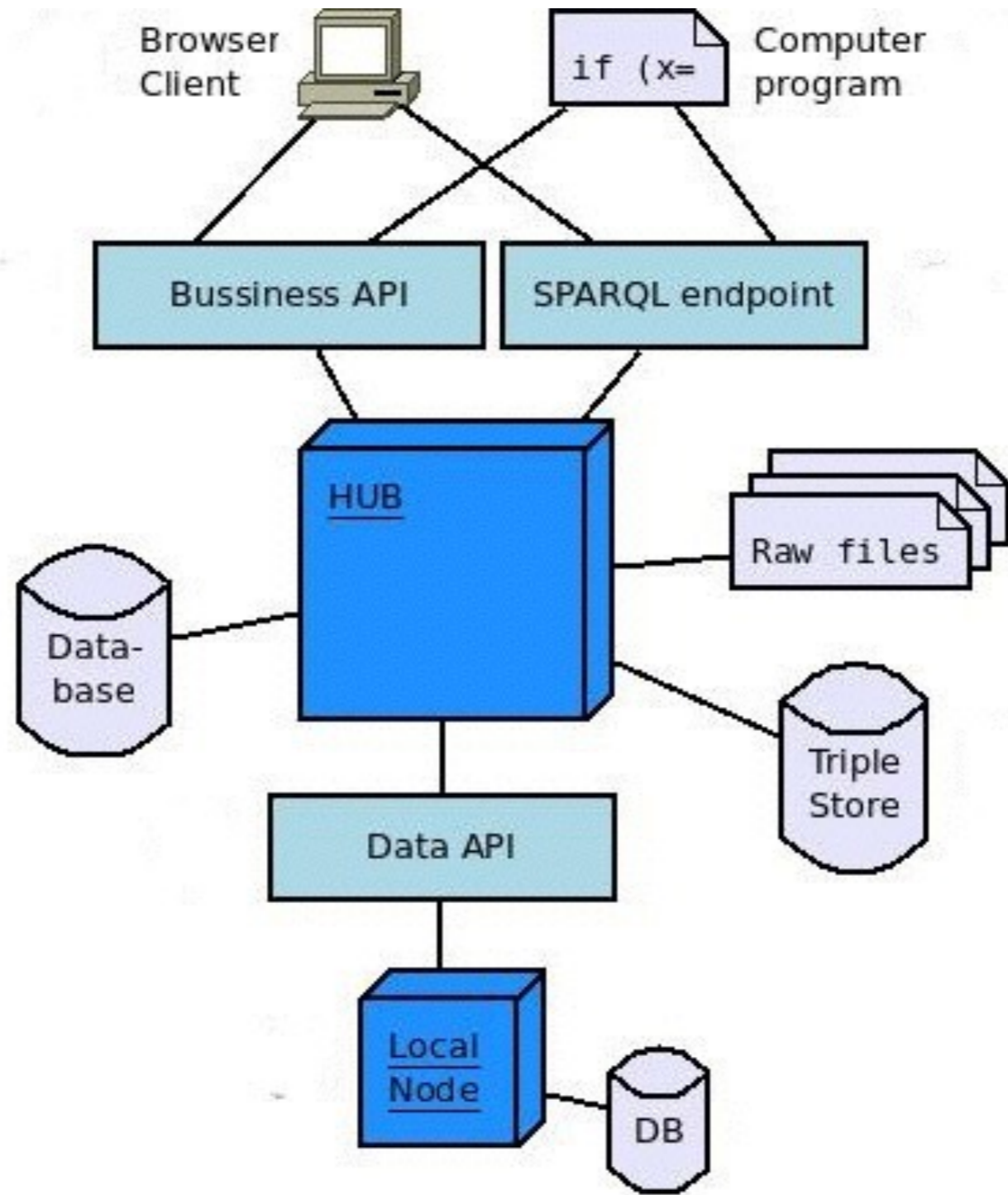
Creator
 Marcelo Moura, Nuno Dourado, J. L. Morais

Subject

Describe this resource
 Type to find descriptors...
 Title X
 A name given to the resource. ⓘ
 Description X
 An account of the resource. ⓘ
 Date Issued X
 Date of formal issuance (e.g., publication) of the resource. ⓘ
 Has Version X
 A related resource that is a version, edition, or adaptation of the described resource. ⓘ
 Get More...

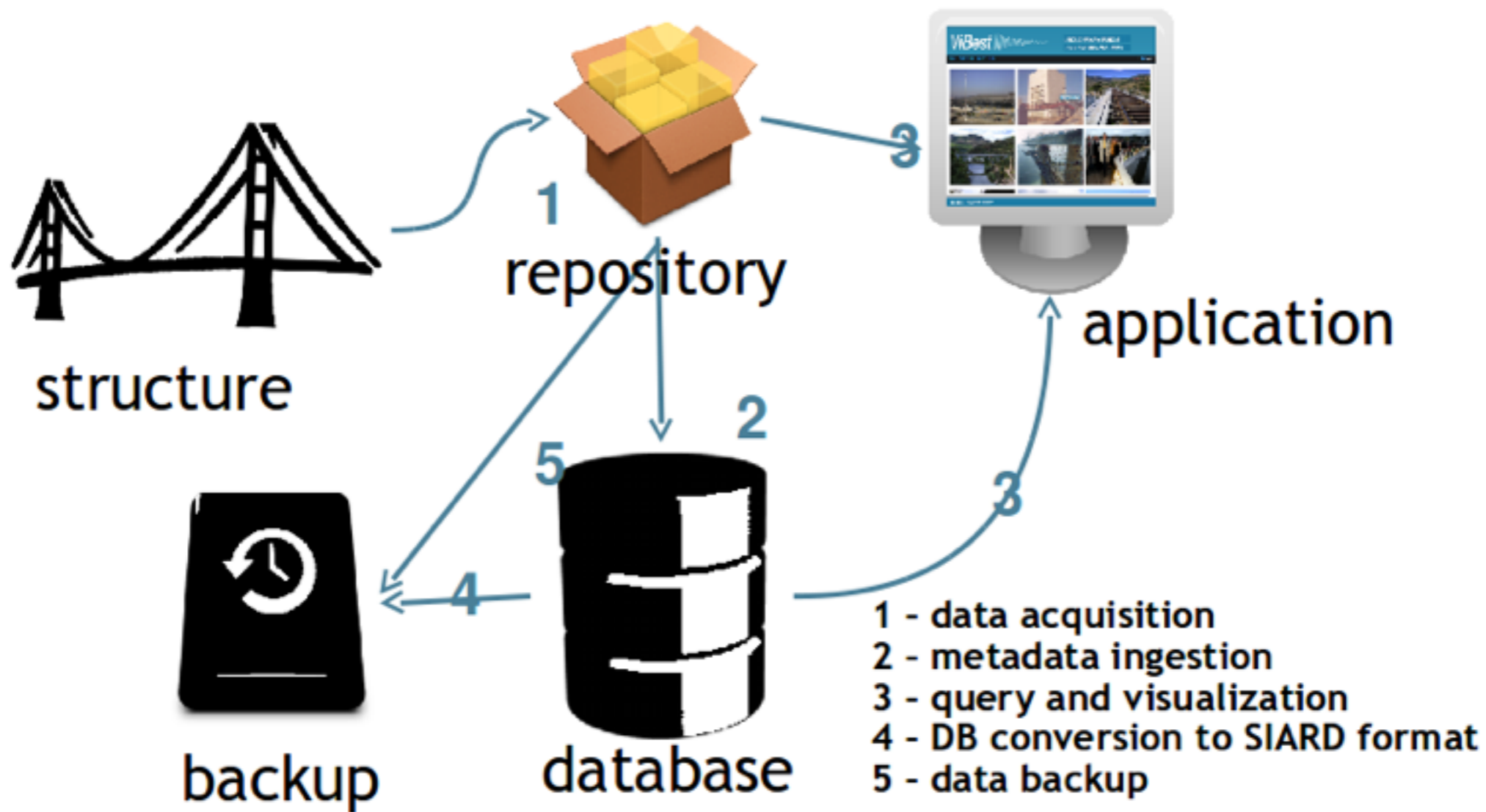
DENDRO

Research Data Management
<http://dendro.fe.up.pt/>



WindScanner

e-science platform
<http://winds.fe.up.pt/ws/>



DYNAMO

Management of Monitoring Data
<http://vibest.fe.up.pt/shm>



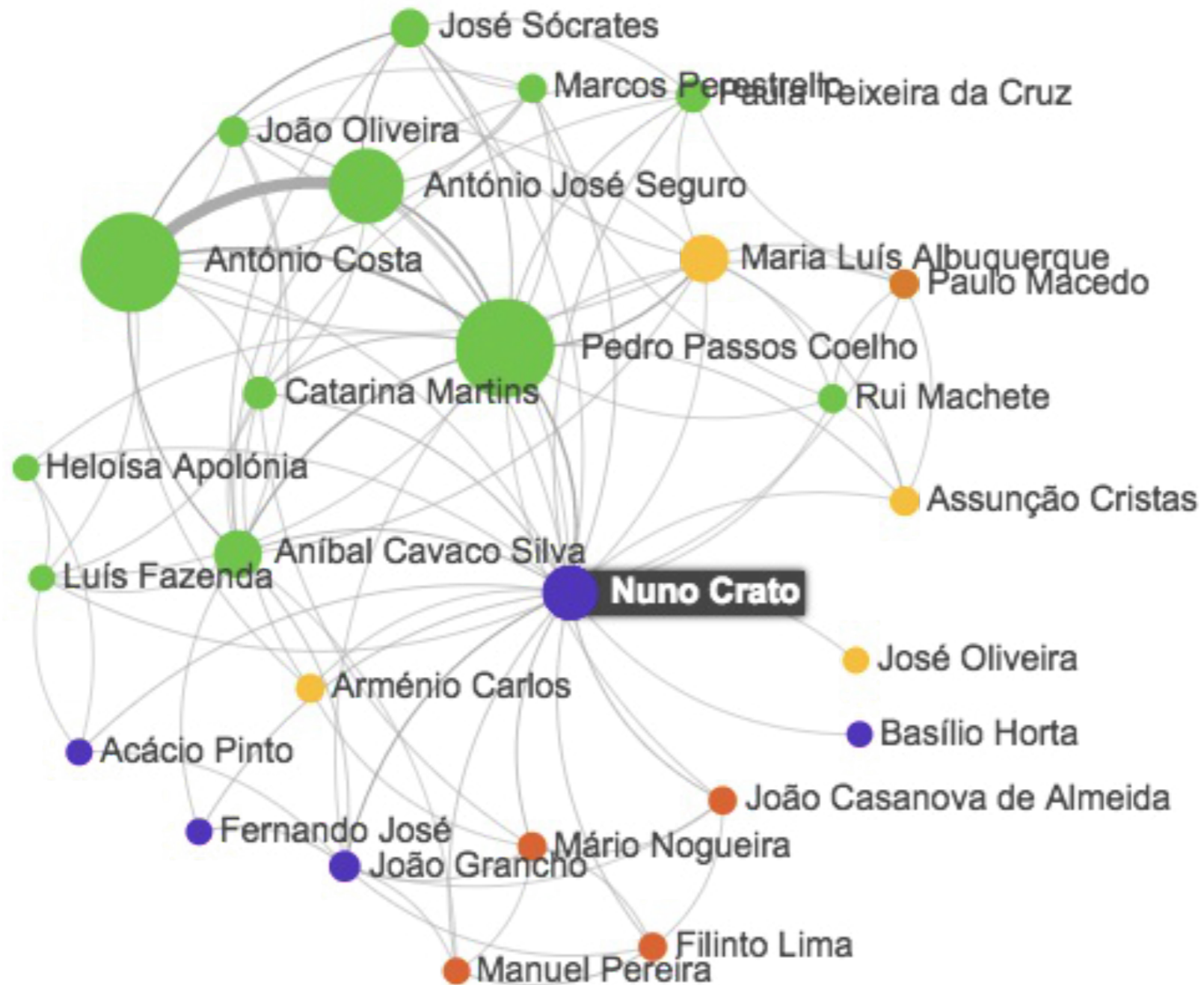
DBPreserve

Data Warehouses for preserving
Relational Databases
[http://www.inesctec.pt/csig-en/
projects/projects/dbpreserve-en/](http://www.inesctec.pt/csig-en/projects/projects/dbpreserve-en/)



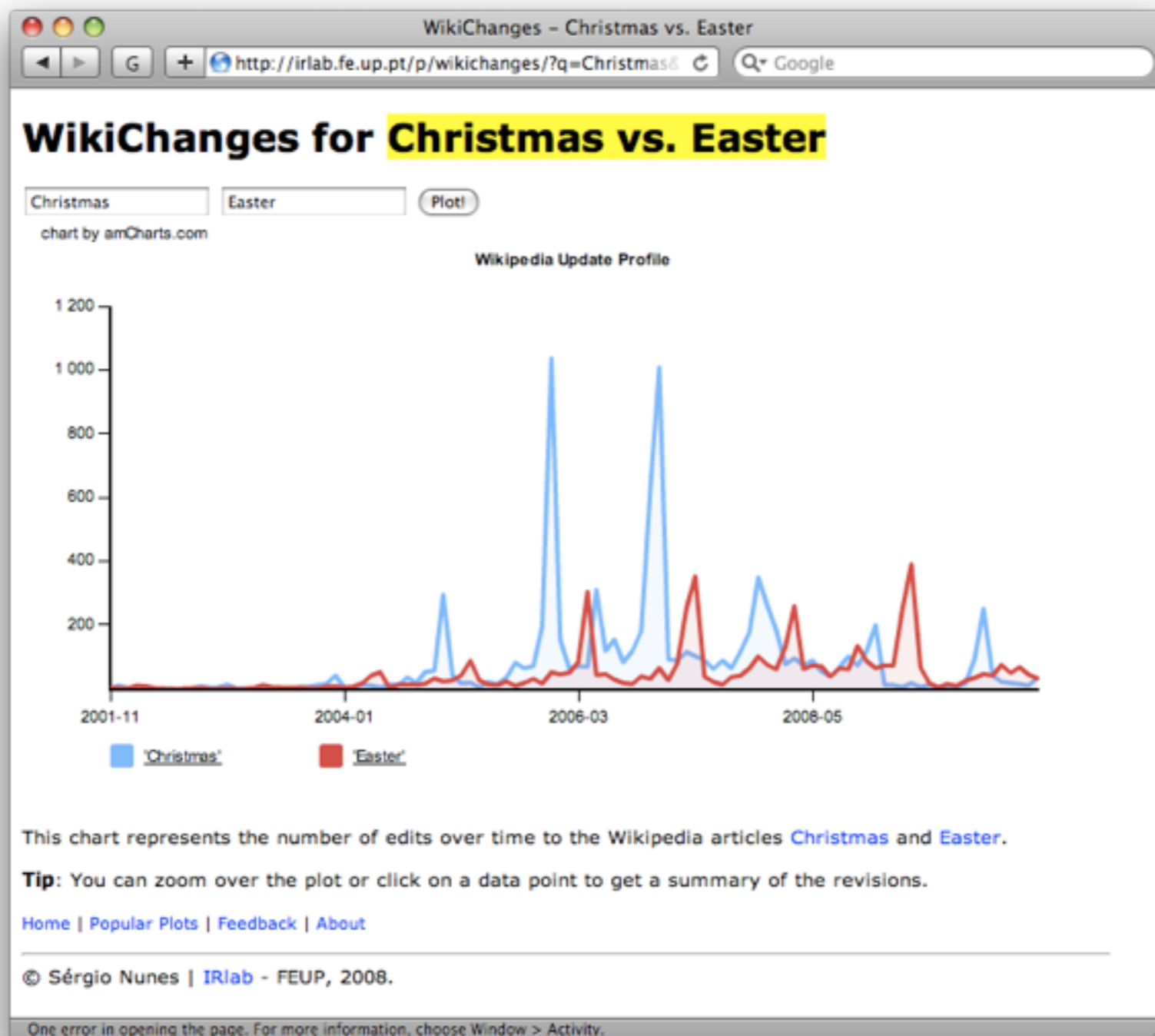
Preservation of
Clinical Records

Digital Preservation Plans



SAPO Time Machine

Mining and Navigation
in Media Archives
<http://noticias.sapo.pt/maquinadotempo/>



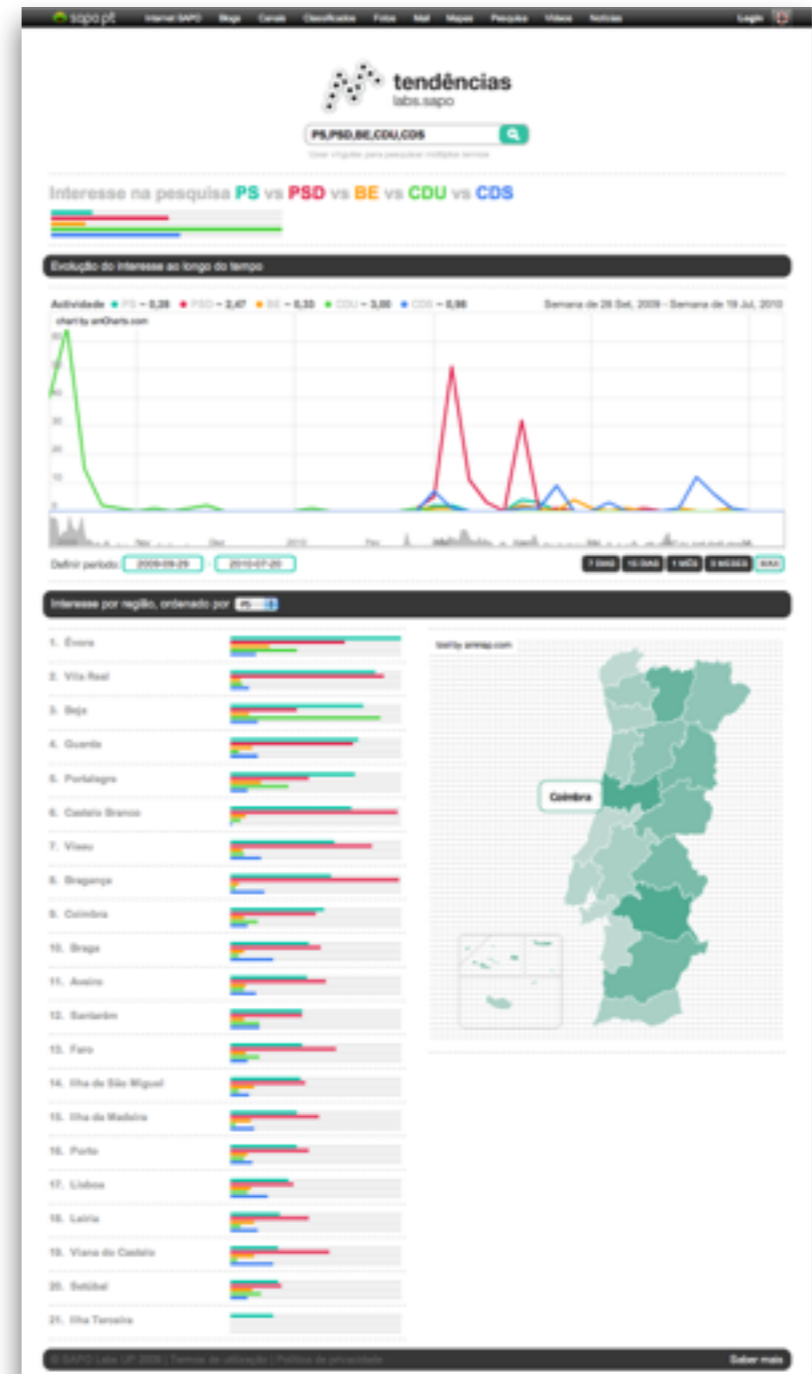
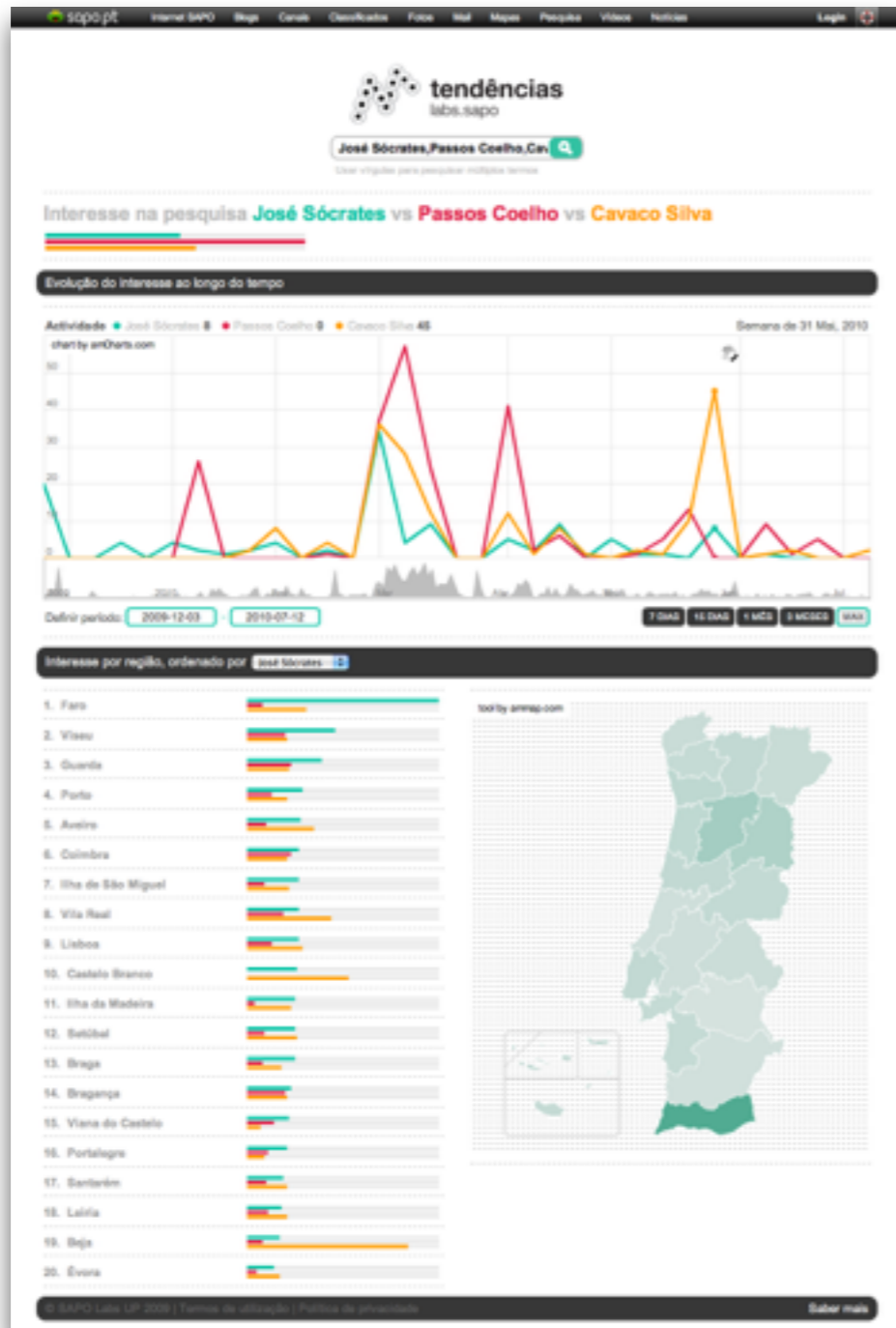
WikiChanges

Temporal Information Retrieval
<http://irlab.fe.up.pt/p/wikichanges/>



follow.up

Information Aggregation
and Visualization
<http://irlab.fe.up.pt/p/follow.up>



SAPO Tendências

Data Streams
Storage and Visualization

Research Topics

Temporal Information Retrieval

Research topics in information retrieval over time-dependent collections, i.e. collections that evolve over time, in particular the World Wide Web.

What is the impact of time in standard information retrieval tasks such as: keyword extraction, ad-hoc search, summarization, question answering, information filtering.

Temporal Information Retrieval

Relevance of Former Content

Understand the importance of former content and how it can be used to aid the user in present retrieval tasks.

Changes Summarization

Address the problem of summarizing changes in dynamic text collections, focusing on the development of techniques that produce an automatic summary of a given time period.

Dynamics of Content over Time

Study how content changes over time in collaboratively edited documents.

Information Retrieval in Digital Media

Research topics in the field of information retrieval and access applied to the area of digital media, in particular to online news production and consumption.

- How consumers interact with digital media
- How content producers use new information technologies
- How information flows in the new digital media ecosystem
- Which tools are needed by media producers and consumers

Information Retrieval in Digital Media

Information Needs

Understand how information consumers and producers use digital media, which are the underlying information needs, what are the usage habits and technologies.

Information Ecosystem

Research how media professionals use information technologies to organize, manipulate and publish content in digital media. Study how information flows within the current news ecosystem, namely mass media and social media.

Information Filtering and Selection

Develop tools to help media consumers and producers filter, organize and select the relevant information for different information needs and scenarios.

Research Data Management

Research topics in the field of research data creation, description and preservation.

- How researchers collect and organize data
- Which tools can support data organisation and description
- Which workflows enforce long-term preservation features
- Which metadata models can be established for a data community

e-Science

Research topics in the field of data-intensive science.

- How to provide researchers with methods for organising and processing data
- Which tools can support data organisation, description and processing
- Which workflows are suited for a scientific domain
- Which metadata is required for data and for processes

InfoLab | Information Systems Research Group

InfoLab is a research group based at the Department of Informatics Engineering at FEUP that brings together teachers and researchers with interests in the area of **information**, especially the sub-areas of:

- Information Management
- Information Systems
- Information Retrieval
- Digital Preservation
- Research Data Management

Soon: <http://infolab.fe.up.pt>

Thank you