

# PROMISE

Participative Research labOratory for Multimedia and Multilingual Information Systems

FP7 ICT 2009.4.3, Intelligent Information Management www.promise-noe.eu

# Deliverable 7.5 Second PROMISE Annual Conference and Proceedings

The CLEF 2011 Conference on Multilingual and Multimodal Information Access Evaluation Held in Amsterdam, The Netherlands, 19-22 September 2011

Version 1.0, 30<sup>th</sup> September 2011









# **Document Information**

Deliverable number: 7.5

Second PROMISE Annual Conference and

Proceedings. The CLEF 2011 Conference on

**Deliverable title:**Multilingual and Multimodal Information Access Evaluation, Held in Amsterdam, The Netherlands,

19-22 September 2011

Delivery date: 30/09/2011 Lead contractor for this deliverable CELCT

Author(s): Pamela Forner

Participant(s): CELCT

Workpackage: 7

Workpackage title: Dissemination, IPR, and Resources

Workpackage leader: ELDA

Dissemination Level: PU – Public

Version: 1.0

Keywords: CLEF 2011 conference, labs and workshop,

Community sessions

# **History of Versions**

Version	Date	Status	Author (Partner)	Description/Approval Level	
0.1	20/09/2011	Draft	CELCT	Circulated to revisors	
1.0	30/09/2011	Final	CELCT	Final version after reviewers comments	

# **Abstract**

Deliverable 7.5 consists of two main parts: the organization of the CLEF 2011 conference and labs, and the publication of the proceedings. The conference and the labs were held at Casa 400 Hotel in Amsterdam from 19<sup>th</sup> to 22<sup>th</sup> September 2011.

This documentation provides an overview of the CLEF 2011 conference together with a description of the labs which were proposed, details on this year's participation, and a short report on the workshops. In addition also a description of the website developed for the event and its contents is provided.





# **Table of Contents**

Do	ocument Information4
Αb	ostract4
Ta	ble of Contents5
Ex	ecutive Summary7
1	Introduction9
2	CLEF 2011 Conference11
3	CLEF 2011 Community Session
4	CLEF 2011 Labs and Workshop14
5	Participation in CLEF 201120
6	CLEF 2011 Web Site and Mobile Version
(	6.1 Advertising26
7	CLEF 2012 and Beyond27
8	Acknowledgements27
Re	eferences27
Αp	pendix A: CLEF 2011 Organization29
Αp	pendix B: CLEF 2011 Labs and Workshop Coordination30
Αp	pendix C: CLEF 2011Conference Programme at a Glance32
Me	ethodologies and Lessons33
	uilding a Cross-Language Entity Linking Collection in Twenty-One Languages, James ayfield, Dawn Lawrie, Paul McNamee, and Douglas Oard33
	earch Snippet Evaluation at Yandex: Lessons Learned and Future Directions, Denis
	wards a Living Lab for Information Retrieval Research and Development. A Proposal for a ving Lab for Product Search Tasks, Leif Azzopardi and Krisztian Balog
	Comparison of Evaluation Metrics for Document Filtering, Enrique Amigó, Julio Gonzalo, d Felisa Verdejo33
La	nguage and Processing34
	ter Keywords and Majority Class Strategies for Company Name Disambiguation in Twitter amiano Spina, Enrique Amigó, and Julio Gonzalo34
	rtomatic Annotation of Bibliographical References for Descriptive Language Materials, arald Hammarström34
lar	Language-Independent Approach to Identify the Named Entities in under-resourced nguages and Clustering Multilingual Documents, Kiran Kumar Nangunuri, Santosh GSK, d Vasudeva Varma34
	ultilingual Question-Answering System in Biomedical Domain on the Web: an evaluation hort Paper), Maria-Dolores Olvera-Lobo and Juncal Gutiérrez-Artacho





Simulation of Within-Session Query Variations using a Text Segmentation Approach Paper), Debasis Ganguly, Johannes Leveling, and Gareth Jones	•
Visual and Context	
Assessing the Scholarly Impact of ImageCLEF, Theodora Tsikrika, Alba García Servica, and Henning Müller	
The Importance of Visual Context Clues in Multimedia Translation, Christopher Har Tao Xu	
To Re-Rank or To Re-Query: Can Visual Analytics Solve This Dilemma? Emanuele Di Marco Dussin, Nicola Ferro, Ivano Masiero, Giuseppe Santucci, and Giuseppe Tino	-
Evaluation Methods for Rankings of Facetvalues for Faceted Search (Short Paper) Schuth and Maarten Marx	, .
Improving Query Expansion for Image Retrieval via Saliency and Picturability (Short Chee Wee Leong, Samer Hassan, Ruiz Miguel, and Rada Mihalcea	. ,
Appendix D: CLEF 2011 Labs and Workshop Programme	35
Appendix E: List of people attending the Event	41
Appendix F: List of Participating Institutions to the Labs	47
Appendix G: CLEF 2011 Sponsors	51
INRIA: National Institute for Research in Computer Science and Control, France	51
Appendix H: CLEF 2011 Website Statistics	53





# **Executive Summary**

Deliverable 7.5 comprises two main parts: the organization of the CLEF 2011 conference and labs, and the publication of the proceedings.

Evaluation activities have been widely credited with contributing to the advancement of information retrieval by (i) providing access to infrastructure and evaluation resources that support researchers in the development of new approaches, and (ii) encouraging collaboration and interaction between researchers both from academia and industry.

As of 2010, CLEF consists of an annual conference on experimental evaluation and a series of participative benchmarking activities referred to as labs. CLEF 2011 continued to implement this new format, with keynotes, contributed papers and lab sessions. CLEF 2011 featured six benchmarking activities: ImageCLEF, PAN, CLEF-IP, QA4MRE, LogCLEF and new this year, MusiCLEF. In parallel, there was a workshop (CHiC) dedicated to the evaluation of information access technologies in the setting of cultural heritage. In addition to these research activities, the program contains 4 Community Sessions, each focusing on a different aspect of IR research: strategy, networking, infrastructure, and evaluation initiatives. The combination of this diverse set of activities makes for a rich and interesting CLEF 2011 program.

The conference and the labs were held at Casa 400 Hotel from 19<sup>th</sup> to 22<sup>nd</sup> September 2011. In this year's event, the conference presentations and the laboratories were interleaved over a three and a half day period.

The outcomes of the Conference and Labs are collected in two different and separated publication forms: conference proceedings are published by Springer in their Lecture Notes for Computer Science (LNCS 6941) series with the title *Multilingual and Multimodal Information Access Evaluation*, while all the experiments carried out by systems during the CLEF 2011 evaluation campaigns are described in the Notebook papers, which are published in digital form only and are available at the CLEF 2011 website (<a href="http://clef2011.org/">http://clef2011.org/</a>). Printed abstracts are collected in the Book of Abstracts. Both Notebook Papers and Book of Abstracts are divided into seven main sections, corresponding to the seven Labs activated this year, they are further subdivided in many sub-sections corresponding to the different tasks planned.

Both online Notebook papers and Book of Abstracts have been assigned an ISBN and ISSN number, and have also been indexed by DBLP.

Post-conference publications in suitable venues, such as journals, are welcome and under the responsibility of lab organizers.

The CLEF 2011 Conference Proceedings, together with the Labs Book of Abstracts have been distributed to attendees at the conference and workshops, and are thus also to be considered as part of this deliverable as additional appendixes.

This documentation provides an overview of the CLEF 2011 conference together with a description of the labs that have been offered, details on this year's participation, and a





short report on the workshops. Moreover, we describe the website developed for the event and the contents available on it.

# In appendix, we provide:

- the list of the people involved in the organization of CLEF 2011
- the list of the institutions involved in the coordination of CLEF 2011 Labs and Workshop
- the Conference Programme
- the Labs and Workshop Programme
- the list of the people attending the event
- the list of the institutions which submitted results in the CLEF 2011 evaluation campaigns (Labs), showing also in which Lab they took part
- the CLEF 2011 Sponsors.
- The CLEF 2011 website statistics





# 1 Introduction

The overall goal of PROMISE is to advance the experimental evaluation of complex multimedia and multilingual information systems in order to support individuals, commercial entities, and communities who design, develop, employ, and improve such complex systems.

PROMISE aims at advancing the experimental evaluation of complex multimedia and multilingual information systems through a virtual laboratory for conducting participative research and experimentation. To this end, PROMISE organizes regular experimental evaluation activities for multilingual and multimedia information systems at an international level and on an annual basis; these activities are embedded in CLEF. The goal is to advance the traditional way of conducting evaluation campaigns by relying on large data sets, tackling realistic use cases and evaluation tasks designed for compelling user and industrial needs, advancing and automating the evaluation process to better support the envisioned tasks and use cases, providing a proper evaluation infrastructure, producing information and knowledge resources from the collected experimental data, and involving Europe-wide large researcher and developer communities with multidisciplinary competencies.

Since 2000 the Cross-Language Evaluation Forum (CLEF) has played a leading role in stimulating research and innovation in a wide range of key areas in the domain of information retrieval. It has become a landmark in the annual research calendar of the international Information Retrieval and Search community. Through the years, CLEF has promoted the study and implementation of evaluation methodologies for diverse types of retrieval task and search scenario. As a result, a broad, strong and multidisciplinary research community has been created, which covers and spans the different areas of expertise needed to deal with the evaluation of solutions to challenging information tasks.

Until 2010, the outcomes of the experiments carried out under the CLEF umbrella were presented and discussed at annual workshops in conjunction with the European Conference for Digital Libraries. CLEF 2010 represented a radical departure from this "classic" CLEF format. While preserving CLEF's traditional core business and goals, namely the benchmarking activities carried out in the various tracks, these activities were complemented with a peer-reviewed conference component aimed at advancing research in the evaluation of complex information systems for cross-language tasks and scenarios. In fact, as of 2010, CLEF consists of an annual conference on experimental evaluation and a series of participative benchmarking activities referred to as labs. The CLEF Conference on Multilingual and Multimodal Information Access Evaluation takes place in September of each year, while the evaluation activities of the CLEF Labs run on an annual cycle during the twelve month period preceding the conference and culminate in workshops taking place in conjunction with the conference.

The Labs continue the CLEF tradition of community-based benchmarking and complemente it with workshops on emerging issues in evaluation methodology. In fact, two different forms





of labs were offered: "campaign-style", or "workshop-style" that could explore issues of information access evaluation and related fields. The Labs are designed to test different aspects of mono- and cross-language information retrieval (IR). The intention is to encourage experimentation with all kinds of multilingual information access – from the development of systems for monolingual retrieval operating on many languages to the implementation of complete multilingual multimedia search services.

CLEF 2011 featured six benchmarking activities: ImageCLEF, PAN, CLEF-IP, QA4MRE, LogCLEF and new this year, MusiCLEF. In parallel, there was a workshop dedicated to the evaluation of information access technologies in the setting of cultural heritage.

# BENCHMARKING ACTIVITIES

# PAN: Uncovering Plagiarism, Authorship, and Social Software Misuse

A benchmarking activity on uncovering plagiarism, authorship, and social software misuse.

# ImageCLEF: Cross Language Image Retrieval Track

A benchmarking activity on the experimental evaluation of image retrieval, focusing on the combination of textual and visual retrieval, including multilingual retrieval and language-independent information access.

# **QA4MRE: Question Answering for Machine Reading Evaluation**

A benchmarking activity on the evaluation of machine reading systems through question answering and reading comprehension tests.

# **LogCLEF: Logfile Analysis**

A benchmarking activity on multilingual log file analysis: language identification, query classification, success of a query.

### MusiClef

A benchmarking activity on the evaluation of music search engines that are based both on audio content and on multilingual textual descriptions.

# **CLEF-IP: Information Retrieval in the Intellectual Property Domain**

A benchmarking activity on intellectual property.

# **WORKSHOP**

**CHIC 2011** Cultural Heritage in CLEF: From Use Cases to Evaluation in Practice for Multilingual Information Access to Cultural Heritage

The CHiC 2011 workshop aims at moving towards a systematic and large-scale evaluation of cultural heritage digital libraries and information access systems and helping to shape a possible roadmap for future activities.





# 2 CLEF 2011 Conference

The CLEF 2011 Conference on Multilingual and Multimodal Information Access Evaluation – an event organized by PROMISE – took place in Amsterdam, The Netherlands on September 19-22, 2011. An initial call for papers was issued before the end of 2010 inviting submissions on all aspects of multilingual and multimodal information access evaluation and deployment. Relevant topics for the CLEF2011 conference include:

- novel methodologies for the design of evaluation tasks, especially user-centric ones;
- alternative methods for improving and automating ground-truth creation;
- task-oriented and easy to communicate metrics;
- innovative techniques for analysing experimental results, including statistical analyses, data mining, and information visualization;
- infrastructures for bringing automation and collaboration in the evaluation process;
- component-based evaluation approaches;
- analysis of the impact of multilingual/multicultural/multimodal differences on interface and search design;
- multilinguality and multimodality in relevant application communities (e.g., digital libraries, intellectual property, medical, music, and video domains) and social media;
- testing and evaluation of translation and summaries over documents and of linked documents in multilingual information retrieval;
- benefits of multilingual information retrieval methods for different user groups or in different use cases, including those relevant to the developing world;
- economic impact/sustainability of multilingual and multimodal information approaches, evaluation methodologies, and deployed systems.

Submissions were gathered using the Springer OCS system, which allowed organizers to manage the submission and review processes, as well as the collection of camera-ready papers. Overall, 23 papers were submitted (19 full and 4 short), a slight increase with respect to last year. In total, 14 papers (10 full and 4 short) were finally accepted with an overall acceptance rate of 60,87%. The accepted papers and the abstracts of the invited talks were published by Springer in their Lectures Notes for Computer Science (LNCS) series.

This year, the papers accepted for the conference included research on evaluation methods and settings, natural language processing within different domains and languages, multimedia and reflections on CLEF.

Two keynote speakers highlighted important developments in the field of evaluation:

• Elaine Toms, from the University of Sheffield, focused on the role of users in evaluation. In her talk titled "Would you trust your IR system to choose your date?" Re-thinking IR Evaluation in the 21st Centur, she argued that at present, evaluation has moved from an





emphasis on topical relevance, to an emphasis on measuring almost anything that can be quantified. The central question should be: What exactly are we evaluating and for what purpose? Toms also said that we have focused far too long on the tool and not on what the tool will be used for. For example, if that IR system was choosing one date, a restaurant or a medical treatment, would we use the same evaluation techniques in use today? The talk considered evaluation from a holistic and contextual perspective. It examined some of the pitfalls in existing approaches, and discussed the issues involved in designing more effective evaluation approaches for assessing interactive IR systems.

Omar Alonso, Microsoft Corporation, California, (USA) presented a framework for the use of crowdsourcing experiments in the setting of retrieval evaluation. Generally speaking and in the context of IR, crowdsourcing involves outsourcing tasks to a large group of people instead of assigning such tasks to an employee or editor. The availability of commercial crowdsourcing platforms offers vast access to an on demand workforce. This new approach makes possible to conduct experiments extremely fast, with good results at a low cost. However, like in any experiment, there are several implementation details that would make an experiment work or fail. Tasks have to be designed carefully with special emphasis on the user interface, instructions, content, and quality control. In his talk, Alonso explored some directions that may influence the outcome of a task and presented a framework for conducting crowdsourcing experiments making some emphasis on a number of aspects that should be of importance for all sorts of IR-like tasks.

All accepted papers and invited talks, are published by Springer in their Lecture Notes for Computer Science (6941) series, which are attached to the paper version of this deliverable. As conference proceedings, the LNCS publication was ready by the conference and was distributed to all the attendees. This innovation, introduced in 2010, is a novelty with respect to the CLEF tradition where CLEF LNCS post-proceedings containing revised version of the papers of the working notes were published almost one year after the workshop.





Figure 1: Front and back cover of the CLEF 2011 LNCS proceedings





The conference Programme is given in Appendix C.

# 3 CLEF 2011 Community Session

This year, also a "community session" was added, which was organized around a strategic EU meeting, aimed at creating awareness of funding opportunities, a networking session organized by the Chorus Network of Excellence, an Evaluation Initiatives session with overviews from other benchmarking fora, and an infrastructure session dedicated to the DIRECT system that help support cross-language retrieval experiments. Brief information about these sessions are given below:

Intelligent Information Management - FP7 ICT Workprogramme 2011 - 2012, Strategic Objective 4.4. - General information and conditions of Call 8.

Mr Stefano Bertolo Project Officer European Commission Information Society and Media Diretorate General Unit "Technologies for Information Management"

### **CHORUS+ Session**

Information Retrieval from Scientific Multimedia Data

Convergence of multidisciplinary research is more and more considered as the {next big thing} to answer profound challenges of humanity related to health, biodiversity or sustainable energy. The integration of life sciences and computer sciences has a major role to play towards managing and analyzing cross-disciplinary scientific data at a global scale. Whereas scientific data management is definitely considered as a major issue in the database community, it is integrated more slowly in the multimedia community. The goal of this session is therefore to promote information retrieval issues from scientific multimedia data and to encourage exchange between multimedia researchers and scientists from other research fields. 4 speakers specialized in inter-disciplinary research were invited and who covered different topics including earth observation, biodiversity informatics and biomedical informatics.

### **Infrastructure Session**

The Promise Evaluation Infrastructure, where Visual Analytics meets Information Retrieval

The increasing effort for the preparation and the execution of Information Retrieval experimental evaluation campaigns – a key means for supporting and fostering the development of multilingual and multimedia information systems - calls for new technologies and products able to make such activity more effective. The PROMISE NoE, founded under the seventh European Framework Programme, aims at supporting





individuals, commercial entities, and communities, who design, develop, employ, and improve such complex systems, providing for increasing both the volume and the utilization of the managed data, and decreasing the rate of the effort for carrying out evaluations. The overall goal of PROMISE is to deliver a unified environment collecting data, knowledge, tools, methodologies, and the user community. The session described the overall PROMISE infrastructure architecture, pointing out the role that a Visual Analytics component plays in such a context in order to understand and make sense of the huge amount of measures and other experimental data that an automated environment quickly hosts. The session had both oral presentations and live demos, demonstrating the basic ideas behind the PROMISE project: data management, data visualization and analysis, and interaction.

### Other Evaluation Initiatives

The goal of the session was to present the current focal points and lessons learned in the other experimental evaluation settings around the world and to promote discussion with respect to what the future objectives in this field should be. The speakers for the Other Evaluation Initiatives session were:

- Ellen Voorhees, Text REtrieval Conference, TREC, NIST, USA
- Hideo Joho (NII Test Collection for IR Systems, NTCIR, NII, Japan
- Jaap Kamps, INitiative for the Evaluation of XML retrieval, INEX, University of Amsterdam, The Netherlands
- Gareth Jones , Benchmarking Initiative for Multimedia Evaluation, MediaEval, Dublin City University, Ireland

# 4 CLEF 2011 Labs and Workshop

The CLEF Labs are a continuation of tracks from previous CLEF workshops. In 2010, CLEF went from being a workshop collocated with an existing conference to a conference in its own right. The CLEF Labs are an integral part of the conference and two different types of lab were offered:

- benchmarking or "campaign-style"
- workshop-style.

The benchmarking labs on the whole follow the traditional ("campaign-style") cycle of activities in a large-scale information retrieval evaluation experiment set-up:

- Definition of the task by the lab organisers;
- Preparation and release of data collections and test data by lab organisers;
- Release of queries, topics or other task descriptions by lab organisers;
- Submission of experimental results by participants;
- Relevance assessments and/or results analysis by lab organisers;





- Release of relevance assessments and/or results analysis by lab organisers;
- Submission of working notes on experiments and results analysis by participants;
- Presentation and discussion at the CLEF conference.

Workshop-style labs are offered as a way of exploring possible benchmarking activities and to provide a means to discuss information retrieval evaluation issues from different perspectives.

A call for lab proposals was distributed in October 2010 and a lab selection committee was formed from leading IR researchers:

- 1. Martin Braschler, Zurich University of Applied Sciences, Switzerland.
- 2. Gregory Grefenstette, Exalead, France.
- 3. Jussi Karlgren, Swedish Institute of Computer Science, Sweden.
- 4. Doug Oard, College of Information Studies, University of Maryland.
- 5. Mark Sanderson, Royal Melbourne Institute of Technology University, Australia.
- 6. Ryen White, Microsoft, USA.

Lab proposals were requested to include a detailed description of the topics and goals of the lab, the target audience, potential opportunities for future versions of the lab, as well as details about the planning and organisation of the lab (e.g. suggested tasks, the data collections used in the lab, the background of lab organisers and steering committee members, etc.).

The proposals were submitted by 8th November 2010 and the selection committee had 2 weeks to decide on the labs that would feature at CLEF 2011. Selection committee members reviewed all proposals and submitted both an individual ranking for each proposal as well as their comments on the lab. All reviews were aggregated by the Lab Chairs and a general ranking of labs was produced.

Of the 9 submitted labs, 6 were accepted as benchmarking labs and 1 accepted as a workshop, resulting in an acceptance rate of 7/9 (=77%).

Seven labs were offered in CLEF 2011: 6 benchmarking labs and 1 workshop:

**CLEF- IP: IR in the IP domain:** CLEF-IP used a collection of ca. 2 million patent documents in English, German, and French, together with patent images. Four tasks were organised: the Prior Art Candidate Search task for finding potential prior art for a document, the Image-based Document Retrieval for finding patent documents or images for a patent document containing images, the Classification task for classifying documents according to the International Patent Classification scheme and the Image-based Classification task for categorising patent images into pre-defined image categories.

Cross-Language Image Retrieval (ImageCLEF): This was the 9th year of running this track in CLEF. Four tasks were offered this year: image retrieval from Wikipedia, medical image retrieval with a data collection from the scientific literature, visual plant species





classification of leaf images and a photo annotation task based on user-generated annotations/tags from Flickr.

**LogCLEF**: In its 3rd CLEF year, the aim of LogCLEF is to analyse transaction logs and classify queries in order to help with understanding user's search behavior in multilingual contexts. Three tasks were organised: a query language identification task, a query classification task against a set of predetermined categories and the analysis of logs with respect to the 'success' of a query. Three different log files were made available: logs from The European Library; logs from the Sogou Chinese search engine; and logs from Deutsche Bildungsserver.

**MusiCLEF:** This was a newcomer to CLEF and the first year of running the lab. The goal of this lab is to aid the development of novel methodologies for both content-based and contextual-based (e.g. tags, comments, reviews, etc.) access and retrieval of music. Two tasks were offered in 2011: content- and context-based music retrieval for music categorisation and music identification for the clustering of the same (or similar) works. The test collection consisted of 10,000 songs in MP3 format.

**QA4MRE - Question Answering for Machine Reading Evaluation**: This was a new task proposed by organisers of the previous Question Answering (QA) track of CLEF. The aim of this lab is to evaluate machine reading ability through question answering and reading comprehension tests. The task involves answering multiple choice questions based on reading a single document and with some inference from previously-acquired background knowledge.

**Uncovering Plagiarism, Authorship, and Wikipedia Vandalism (PAN)**: This is the second year of running PAN at CLEF and three tasks were offered to participants: plagiarism detection, author identification and Wikipedia vandalism detection. The last task seeks to support users of Wikipedia in their search for 'vandalised' pages.

In addition to these benchmarking activities, also the CHiC workshop was held.

**CHiC 2011** – Cultural Heritage in CLEF: From Use Cases to Evaluation in Practice for Multilingual Information Access to Cultural Heritage: This workshop aimed at surveying use cases for information access to cultural heritage materials and review evaluation initiatives and approaches in order to identify future opportunities for novel evaluation experiments and measures. Workshop participants were asked to introduce their ideas for possible evaluation scenarios. Invited talks were given, addressing the following topics:

- use cases, evaluation needs, and best practices coming from field experience in the cultural heritage institutions;
- evaluation perspectives, frameworks, and approaches in the digital library and digital curation fields;
- synergies and relationships between large-scale evaluation campaigns and CH evaluation.





Most of the organization of the labs lies in the hands of the individual lab organizers, but the scheduling is determined by lab size and in accordance with the room and time restrictions imposed by the local and lab chairs.

The results of the experiments conducted within CLEF 2011 evaluation campaigns or benchmarks that are run in a yearly circle were presented and discussed at the workshop, 19-22 September, Amsterdam, The Netherlands. The workshop plays an important role by providing the opportunity for all the groups that have participated in the evaluation campaign to get together comparing approaches and exchanging ideas. The Labs workshop were run in parallel sessions distributed over the entire 3 and a half days of the event interweaving their schedules with that of the conference.

In addition, a general **poster** session was arranged at the end of the first day, where participants form all the different Labs had the opportunity to present their works. This resulted in a lively and interactive discussion among participants and the people attending the event.

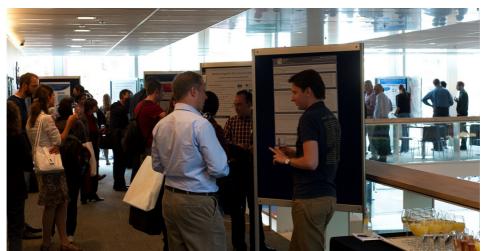


Figure 2: Poster Session in the Lobby at Casa400 Hotel

Each Lab had its own schedule and programme, but they were almost structured in two main parts: presentation of the main results obtained in the task and reports from the participants discussing the approaches and the techniques used by the systems. A couple of Labs had also some important invited talks:

Walter Daelemans, CLiPS, University of Antwerp, Belgium. In his talk Text Mining in Biograph, he described the Biograph project, which is a biomedical knowledge discovery project combining graph data mining with structured biomedical information and with text mining on medline abstracts. It is a cooperation between the molecular genetics, data mining, and computational linguistics research groups of the University of Antwerp. In his talk, he outlined the general architecture of the





system, which is currently applied to the problem of ranking genes according to relevance for diseases (gene prioritization). He also described the text mining component (rule induction combined with rule certainty and confidence measurement using among others modality and negation analysis), and showed results both on text mining benchmarks and gene prioritization benchmarks. The approach is more generally applicable than for gene prioritization only; and he showed how the approach can be interpreted as a general question answering engine.

- Maria Teresa Turell and Malcolm Coulthard. Their presentation titled Forensic Plagiarism Detection and Authorship Attribution: On the Linguists' Achievements and the Challenges for Computerized Analysis had three main objectives:
  - 1) define the context of real forensic cases in terms of what is expected from forensic linguists when giving evidence in court, what their object of study is (markers/parameters that make up for an individual's idiolectal style), the nature of the material (scarce, short) with which they deal and the methodology requested (qualitative, corpus linguistics, quantitative analyses);
  - 2) account for the key issues and challenges that are at stake in present-day forensic linguistics, whose aims are
    - a) to count on as many samples as possible from each individual's idiolectal style and
    - b) to reach a base-rate-knowledge for as many variables/parameters as possible in all linguistic levels; and finally,
  - 3) explain the problems that forensic linguists encounter in their work and also explore and suggest how computational linguistics could help to solve them (i.e.: in plagiarism detection, questions related to directionality which should be solved in linguistic terms; in authorship attribution, issues related to the "doesn't occur" (zero) contexts, so far not tagged in available corpora.

The ImageCLEF Lab also organized a very interesting **DEMO** session which was much appreciated. The idea is propose it again next year, maybe together with the poster session







Figure 3: Demo Session during ImageCLEF Lab

Each lab sessions at the workshop contained ample time for general discussion in order to give space to more in-depth exam of the results and engagement by all participants - not just those presenting campaign results and papers. Overall, the workshops provided an ample panorama of the current state-of-the-art and the latest research directions in the multilingual and multimodal information retrieval area.

More information on the CLEF 2011 Labs can be found in the electronic Working Notes papers which are available online at the CLEF website (http://clef2011.org/).

Moreover, a book of abstract with ISBN and ISSN numbers were prepared and distributed to all the event attendees, together with USB flash drives containing all the full papers of the Labs.

In the last session of the event, lab organizers were asked to briefly report about the main outcomes of the workshop and express intentions and plans for the future.





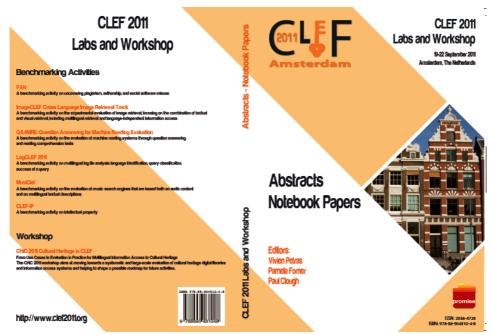


Figure 4: Front and back cover of the CLEF 2011 "Book of Abstracts"

The Labs programmes are given in Appendix D.

# 5 Participation in CLEF 2011

Overall, CLEF 2011 was attended by more than 170 people from different academic and industrial institutions; this is quite encouraging as the participation was increased with respect to last year. The complete list of people attending the event is given in Appendix E. As Figure 5 shows, massive participation is still from Europe, while the other continents remained more of less stable with respect to last years. Although most of the people are still coming from Europe, an increasing interest in CLEF all around the world can be registered, above all from the United States. Important to notice is that, this year, also some participants from Africa were present.





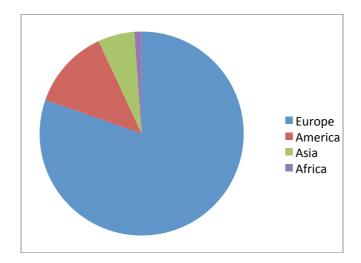


Figure 5: Participation according to the continents

A regards the geographical distribution of the participants according to the country, they are distributed as follows: 20 from Spain, 18 from Germany, 16 from The Netherlands and quite surprisingly 15 from the United States.

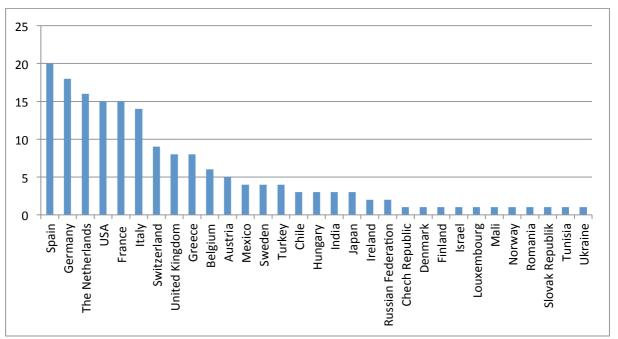


Figure 6: Participation according to the countries

As for the Labs, about 190 groups initially registered showing interest in the benchmarking activities proposed this year at CLEF 2011. This proves, again that CLEF has achieved a





high visibility and shows that the labs are still drawing a large participation from the scientific communities in the fields of information retrieval, natural language processing and multimedia analysis. Multilingual information access is a truly multidisciplinary domain and one of the main objectives of CLEF is to create a forum where groups working in many different areas have a chance to gather together, see what others are doing, and discuss exchanging ideas and comparing results.

The registrations to the Labs were gathered via the CELCT infrastructure and a form was made available on the CLEF 2011 website. Registration opened on March 1 and was closed on May 20. All registrations were posted on a webpage whose link was made available only to Labs Organizers. In this way, each organizer could have access at any time to the updated status of registrations in real time. Registrations to the labs were distributed as it is shown in Table 1.

CLEF 2010 LABS	REGISTERED GROUPS	SUBMITTIN G RUNS	SUBMITTING WN PAPERS
ImageCLEF	88	48	40
PAN	52	27	22
CLEF-IP	30	12	12
MLQA	22	13	12
WePS	33	13	10
TOTAL	225	113	96

CLEF 2011 LABS	REGISTERED GROUPS	SUBMITTING RUNS	SUBMITTING WN PAPERS
ImageCLEF	73	44	44
PAN	45	23	22
CLEF-IP	25	8	8
QA4MRE	25	12	9
LogCLEF	17	4	4
MusiCLEF	4	3	2
TOTAL	189	94	89

Table 1: Registrations, runs and WN papers in CLEF 2010 and 2011

One participant may have registered to more than one Lab. As usual, ImageCLEF is the most popular Lab able to attract many participants not only from Europe but also from the United States and a few from other continents. MusiCLEF, the new lab at CLEF, which was scheduled as a benchmarking activity was actually converted into a workshop.

This year, about 100 groups, both researchers and system developers, submitted runs to the different Labs, despite the number of registered participants to the benchmarking activities was much higher than that, as Table 1 shows. In comparison to last year, the number of participants taking part to the labs was a little bit lower, but only a slight decrease can be registered. A list of groups and indications of the Labs in which they participated is given in the Appendix F to this document.





# 6 CLEF 2011 Web Site and Mobile Version



Figure 7: Home page of the CLEF 2011 Web site.

Currently, there are three websites associated with CLEF: (i) the CLEF campaign website<sup>1</sup> which maintains information on the evaluation activities that have been conducted over the first ten years of CLEF from 2000 to 2009, and (ii) the CLEF 2010<sup>2</sup> and (iii) the CLEF 2011<sup>3</sup> websites that provide all the necessary information about CLEF 2010 and 2011, respectively, including information about the CLEF Conference and the CLEF Labs, as well as electronic versions of the Labs Notebook papers. The CLEF websites are used to not only support and

For the registration to the Labs click here

- Monday 19 September, from 08.00 onwards

<sup>1</sup> http://www.clef-campaign.org/

<sup>&</sup>lt;sup>2</sup> http://www.clef2010.org

<sup>3</sup> http://www.clef2011.org





promote the visibility of the evaluation activities of the CLEF campaigns, but to also archive their outcomes, and thus act as a vehicle for the dissemination of information and knowledge on multilingual and multimedia information systems.

The Web site also contains the electronic version of all the papers submitted to the labs accessible under the "Labs → Notebook papers" menu.

Moreover, also the slides of the presentations given during the conference are accessible and available for download on the CLEF 2011 Web site.

The publications, both of the conference and of the Labs are indexed by DBPL and linked to the bibliographic social networks BibSonomy.

The photos taken during the event have been posted to Flickr and tagged, at least, with the "CLEF 2011" and "PROMISE" tags. This photo album has been linked also from the CLEF 2011 Web site<sup>4</sup>.

This year, when you register for the conference, an account was created in a social network portal dedicated to CLEF 2011. This allowed participants to communicate with each other in an easy way before the conference starts.

\_

<sup>&</sup>lt;sup>4</sup> This activity is still ongoing at the time of the writing of the present deliverable.







Figure 8: Home page of the Crowdwine social network

This year also a Mobile version of the CLEF 2011 was provided by CELCT containing all useful information for the vent like for example the programme, the people giving a presentation, the Labs the sponsor and the map.





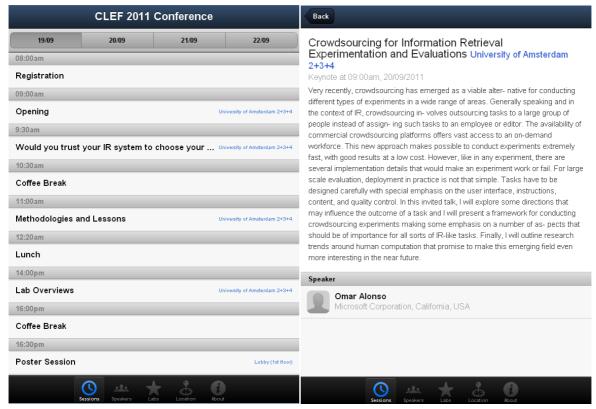


Figure 9: Mobile Version of the CLEF 2011 Web site.

The high visibility of the CLEF 2010 and 2011 websites is evident in the number of visits they attract. The CLEF 2010 website had 14,498 visits and 6,861 visitors in 2010, coming especially from Italy, whereas it still has a good number of visitors in 2011, and quite surprisingly, they mostly come from the United States.

The CLEF 2011 website is also having a considerable number of visits: from January to September 2011, 14,054 visits and 6,294 visitors were registered coming mostly from Europe, but this year, a big increase can be seen also in the visitors from US. More details can be found in Appendix H.

# 6.1 Advertising

The CLEF 2010 Conference and Labs (call for labs, call for papers, call for participation) have been announced and advertised on several mailing lists:

- Evaluation Inivitatives
  - CLEF (Cross-Language Evaluation Forum community, Europe)
  - TREC (Text Retrieval Conference, USA)
  - TRECvid (TREC Video Retrieval Evaluation, USA)
  - NTCIR (NII Test Collection for IR Systems, Japan)





- o FIRE (Forum for Information Retrieval Evaluation, India)
- Research field news letters
  - SIG-IRList (ACM Special Interest Group on Information Retrieval (SIGIR) moderate newsletter)
  - DBWorld (ACM Special Interest Group on Management of Data (SIGMOD) moderated newsletter)
  - BCS-IRSG list (Information Retrieval Special Interest Group of the BCS, The Chartered Institute for IT, UK)
  - o ASIS-L (American Society for Information Science, General List)
  - SIGDL-L (American Society for Information Science, Digital Libraries Interest Group)
  - o DBItaly (Italian information management systems databases, information retrieval systems, digital libraries, ... moderated newsletter)
- European Projects
  - o Europeana (<a href="http://www.europeana.eu/">http://www.europeana.eu/</a>)
  - DL.org (http://www.dlorg.eu/)
  - o DELOS (http://www.delos.info/)

# 7 CLEF 2012 and Beyond

CLEF 2012 will follow a similar format as CLEF 2010 and 2011, namely conference plus labs and workshops, and will be organized by University of Roma la Sapienza, Italy, in September 2012. A call for labs proposals will be issued at the beginning of October 2011 and an initial call for papers will be issues by the end of the year.

For CLEF 2013 and onwards, the plan is to open a bid so that interested institutions and organizations will be able to apply and compete to organize and host the event.

# 8 Acknowledgements

We would like to warmly thank all the people who worked hard to make CLEF 2011 possible. We should also like to thank the members of the CLEF Steering Committee who have assisted us with their advice and suggestions.

# References

[Forner et al. 2011]

P. Forner, J. Gonzalo, J. Kekäläinen, M. Lalmas, and M. de Rijke (Eds.). *Multilingual and Multimodal Information Access Evaluation*. Proceedings of the Second International Conference of the Cross-Language Evaluation Forum, CLEF 2011, Amsterdam, The Netherlands, September 2011, Lecture Notes in Computer Science (LNCS 6941) Springer 2011





[Petras et al. 2011]

V. Petras, P. Forner, and P. Clough (Eds.) *CLEF 2011 Labs and Workshop, Notebook Papers*, 19-22 September, Amsterdam, The Netherlands. Online proceedings. September 2011 (http://clef2011.org/index.php?page=pages/proceedings.php)

ISBN 978-88-904810-1-7.





# **Appendix A: CLEF 2011 Organization**

CLEF 2011 was organized by the Intelligent Systems Lab Amsterdam (ISLA) of the University of Amsterdam.

# **General Chairs**

Julio Gonzalo, National University of Distance Education, Spain Maarten de Rijke, University of Amsterdam, The Netherlands

# **Program Chairs**

Jaana Kekäläinen, University of Tampere, Finland Mounia Lalmas, Yahoo! Research Barcelona, Spain

### **Labs Chairs**

Paul Clough, University of Sheffield, United Kingdom Vivien Petras, Humboldt University of Berlin, Germany

### **Lab Selection Committee**

Martin Braschler, Zurich University of Applied Sciences, Switzerland Gregory Grefenstette, Exalead, France Jussi Karlgren, Swedish Institute of Computer Science, Sweden Doug Oard, College of Information Studies, University of Maryland, USA Mark Sanderson, Royal Melbourne Institute of Technology University, Australia Ryen White, Microsoft, USA

# **Resource and Publicity Chair**

Khalid Choukri, Evaluations and Language resources Distribution Agency (ELDA), France

# **Organization Chair**

Emanuele Pianta, Center for the Evaluation of Language and Communication Technologies (CELCT), Italy

# **Organizing Committee**

Intelligent Systems Lab Amsterdam (ISLA), University of Amsterdam, The Netherlands:

Richard Berendsen

**Bouke Huurnink** 

Edgar Meij

Maarten de Rijke

Wouter Weerkamp

Center for the Evaluation of Language and Communication Technologies (CELCT), Italy:

Pamela Forner

Giovanni Moretti





# **Appendix B: CLEF 2011 Labs and Workshop Coordination**

It would be impossible to run the CLEF evaluation initiative and organize the annual workshops without considerable assistance from many groups. CLEF is organized on a distributed basis, with different research groups being responsible for the running of the various Labs. A list of the main institutions responsible for the coordination of the different CLEF 2011 Labs is given here below:

- Berlin School of Library and Information Science, Humboldt University Berlin, Germany
- Business Information Systems, University of Applied Sciences Western Switzerland, Switzerland
- CEA LIST, France
- Center for the Evaluation of Language and Communication Technologies (CELCT), Italy
- Centre for Next Generation Localisation, Dublin City University, Ireland
- Department of Computer Science, Bar-Ilan University, Israel
- Department of Computer Science, Illinois Institute of Technology, Chicago, USA
- Department of Information and Communication Systems Engineering, University of the Aegean, Greece
- Department of Information Science, Universität Hildesheim, Germany
- Department of Mathematics and Computer Science, Duquesne University, Pennsylvania,
   USA
- Fraunhofer Institute for Digital Media Technology IDMT, Germany
- Information Retrieval Facility, Vienna, Austria
- Information Sciences Institute of the University of Southern California, USA
- INRIA, France
- max-recall GmbH, Vienna, Austria
- NLE Lab., Universidad Politécnica de Valencia, Spain
- NLP & IR Group, UNED, Spain
- Oregon Health and Science University (OHSU), Portland, OR, USA
- Department of Library and Information Sciences, University of North Texas, USA
- Technische Universität Wien, Austria
- University of Alicante, Spain
- University of Geneva, Switzerland





- University of Limerick, Ireland
- University of Padua, Italy
- University of Sheffield, UK
- Webis Group, Bauhaus-Universität Weimar, Germany





# Appendix C: CLEF 2011Conference Programme at a Glance

# Monday September 19, 2011

	U. of Amsterdam 2 U. of Amsterdam 3 U. of	Amsterdam 4		
09.00-09.30	Opening			
09.30-10.30	Keynote Elaine Toms			
10.30-11.00	Coffee break			
11.00-12.20	Conference Session: Methodologies and Lessons			
12.20-14.00	Lunch			
14.00-16.00	Lab Overviews			
16.00-16.30	Coffee break			
16.30-18.00	Poster Session (lobby)			
16.30-19.30	Reception (lobby)			

# Tuesday September 20, 2011

	U. of Amsterdam 2	U. of Amsterdam 3	U. of Amsterdam 4	Sorbonne	
09.00-10.00	Keynote Omar Alonso				
10.00-10.30	Coffee break				
10.30-12.30	ImageCLEF CLEF-IP QA4MRE CHiC				
12.30-14.00	Lunch				
14.00-16.00	ImageCLEF	CLEF-IP	QA4MRE	CHIC	
16.00-16.30	Coffee break				
16.30-17.50	Conference Session: Language and Processing				
18.00-22.30	Dinner (by boat)				





### Wednesday September 21, 2011

	U. of Amsterdam 2	U. of Amsterdam 3	U. of Amsterdam 4	Sorbonne
08.30-10.00	Strategy	Infrastructure	Evaluation Initiatives	Networking
10.00-10.30	Coffee break			
10.30-12.30	ImageCLEF	PAN	QA4MRE	
12.30-14.00	Lunch			
14.00-16.00	ImageCLEF	PAN	LogCLEF	
16.00-16.30	Coffee break			
16.30-17.50	Conference Session: Visual	l and Context		
	Thursday September 22, 2011			
	U. of Amsterdam 2	U. of Amsterdam 3	U. of Amsterdam 4	
09.00-11.00	MusicCLEF	PAN	LogCLEF	

# **Methodologies and Lessons**

Coffee break

Reports Out

Closing

11.00-11.30

11.30-13.15

13.15-13.30

Building a Cross-Language Entity Linking Collection in Twenty-One Languages, James Mayfield, Dawn Lawrie, Paul McNamee, and Douglas Oard

Search Snippet Evaluation at Yandex: Lessons Learned and Future Directions, Denis Savenkov, Pavel Braslavski, and Mikhail Lebedev

Towards a Living Lab for Information Retrieval Research and Development. A Proposal for a Living Lab for Product Search Tasks, Leif Azzopardi and Krisztian Balog

A Comparison of Evaluation Metrics for Document Filtering, Enrique Amigó, Julio Gonzalo, and Felisa Verdejo





# **Language and Processing**

- Filter Keywords and Majority Class Strategies for Company Name Disambiguation in Twitter, Damiano Spina, Enrique Amigó, and Julio Gonzalo
- Automatic Annotation of Bibliographical References for Descriptive Language Materials, Harald Hammarström
- A Language-Independent Approach to Identify the Named Entities in under-resourced languages and Clustering Multilingual Documents, Kiran Kumar Nangunuri, Santosh GSK, and Vasudeva Varma
- Multilingual Question-Answering System in Biomedical Domain on the Web: an evaluation (Short Paper), Maria-Dolores Olvera-Lobo and Juncal Gutiérrez-Artacho
- Simulation of Within-Session Query Variations using a Text Segmentation Approach (Short Paper), Debasis Ganguly, Johannes Leveling, and Gareth Jones

### **Visual and Context**

- Assessing the Scholarly Impact of ImageCLEF, Theodora Tsikrika, Alba García Seco de Herrera, and Henning Müller
- The Importance of Visual Context Clues in Multimedia Translation, Christopher Harris and Tao Xu
- To Re-Rank or To Re-Query: Can Visual Analytics Solve This Dilemma? Emanuele Di Buccio, Marco Dussin, Nicola Ferro, Ivano Masiero, Giuseppe Santucci, and Giuseppe Tino
- Evaluation Methods for Rankings of Facetvalues for Faceted Search (Short Paper), Anne Schuth and Maarten Marx
- Improving Query Expansion for Image Retrieval via Saliency and Picturability (Short Paper), Chee Wee Leong, Samer Hassan, Ruiz Miguel, and Rada Mihalcea





# **Appendix D: CLEF 2011 Labs and Workshop Programme**

# ImageCLEF Lab, Tuesday September 20 and Wednesday September 21

# 10.30-12.30: ImageCLEF session: Overview presentations

chair: Henning Müller (University of Applied Sciences Western Switzerland, Switzerland)

10:30 "Medical retrieval overview", Steven Bedrick (Oregon Health & Science University, USA)

11:00 "Wikipedia image retrieval overview", Jana Kludas (University of Geneva, Switzerland)

11:30 "Photo annotation overview", Stefanie Nowak (Fraunhofer, Germany)

12:00 "Plant identification overview", Alexis Joly (INRIA, France)

12.30-14.00: Lunch

### 14.00-16.00: Participants' Presentations

chair: Stefanie Nowak (Fraunhofer, Germany)

14:00-14:15 "DEMIR at ImageCLEFMed 2011: Evaluation of Fusion Techniques for Multimodal Content-based Medical Image Retrieval", Adil Alpkocak (Dokuz Eylul University, Turkey)

14:15-14:30 "LABERINTO at ImageCLEF 2011 Medical Image Retrieval Task", Mariano Crespo (Universidad de Huelva, Spain)

14:30-14:45 "UNED-UV experiments using Multimodal information approaches" (Wikipedia Image Retrieval), Ana Garcia-Serrano (UNED, Spain)

14:45-15:00 "UNT at ImageCLEF 2011: Relevance Models and Salient Semantic Analysis for Image Retrieval", Miguel Ruiz (University of North Texas, USA)

15:00-15:15 "The TUBFI submission to the ImageCLEF2011 Photo Annotation Task", Alexander Binder (Berlin Institute of Technology & Fraunhofer, Germany)

15:15-15:30 "SZTAKI@ImageCLEF2011 Photo Annotation Task", Bálint Daróczy (BPACAD/SZTAKI, Hungary)

15:30-15:45 "Guiding Active Contours for Tree Leaf Segmentation and Identification", Guillaume Cerutti/Laure Tougne (Université de Lyon, France)

15:45-16:00 "Participation of INRIA & Pl@ntNet to ImageCLEF 2011 plant images classification task", Hervé Goeau (INRIA, France)





# Wednesday September 21

# 10.30-12.30: ImageCLEF session: Demos + participants' presentations

chair: Miguel Ruiz (University of North Texas, USA)

10:30-10:45 "Multi-disciplinary modality classification for medical images", Victor Gal (University of Ghent, Belgium)

10:45-11:00 "XRCE and CEA LIST's participation at ImageCLEF Wikipedia Retrieval 2011", Adrian Popescu (CEA-LIST, France)

11:00-11:15 "The University of Amsterdam's Concept Detection System at ImageCLEF 2011" (Photo Annotation - Retrieval Task), Koen van de Sande (University of Amsterdam, The Netherlands)

11:15-11:30 "MLKD's Participation at the CLEF 2011 Photo Annotation and Concept-Based Retrieval Tasks", Eleftherios Spyromitros-Xioufis (Aristotle University of Thessaloniki, Greece)

### 11:30-12:30 Demo session

- "CEB/NLM Medical Image Retrieval" demo, Dina Demmer-Fushman (Natinonal Library of Medicine, USA)
- "DEMIR Medical Image Retrieval" demo, Tolga Berber, (Dokuz Eylul University, Turkey)
- "medGIFT Medical Image Retrieval" demo, Henning Müller (HES SO, Switzerland)
- "MUFIN Annotation Tool and Image Retrieval" demo, Petra Budikova (Masaryk University, Brno, Czech Republic)
- "RISE: Relevant Image Search Engine" demo, Roberto Paredes, Mauricio Villegas, and Luis Leiva (Universidad Politecnica de Valencia, Spain)

12.30-14.00: Lunch

# 14.00-16.00 **Looking ahead: ImageCLEF 2012**

chair: Jana Kludas (University of Geneva, Switzerland)

14:00-14:20 "New ideas for photo annotation", Bart Thomee (Yahoo! Barcelona, Spain)

14:20-14:40 "Image Annotation in the Wild", Roberto Paredes (Universidad Politécnica de Valencia, Spain)

14:40-15:00 "RobotVision@ImageCLEF2012: Towards 3D Spatial Representations", Barbara Caputo (IDIAP, Switzerland), presented by Henning Müller

15:00-16:00 Discussion

\_\_\_\_\_\_





#### CLEF-IP Lab, Workshop Program, Tuesday Sep 20, 2011

- 10.30-10.50 Report on the CLEF-IP 2011 Experiments: Exploring Patent Summarization, P. Mahdabi, L. Andersson, A. Hanbury and F. Crestani
- 10.50-11.10 Combining document representations for prior-art retrieval, E. D'Hondt, S. Verberne, W. Alink and R. Cornacchia
- 11.10-11.30 Exploring Keyphrase Extraction and IPC Classification Vectors for Prior Art Search, M. Verma and V. Varma
- 11.30-11.50 Does Patent IR profit from Linguistics or Maximum Query Length?, D. Becks, J. Jürgens, C. Womser-Hacker, M. Eibl, J. Kürsten and T. Wilhelm
- 11.50-12.30 Discussion: Prior Art Candidates Search, Present and Future
- 12:30-14:00 Lunch
- 14.00-14.20 Patent classification experiments with the Linguistic Classification System LCS in CLEF-IP 2011, S. Verberne and E. D'Hondt
- 14.20-14.40 CLEF-IP 2011 Working Note: Utilizing Prior Art Candidate Search Results for Refined IPC Classification, H.-K. Seo, K. Han and J. Lee
- 14.40-15.00 Classifying patent Images, R. Morzinger, A. Horti, G. Thallinger, N. Bhatti and A. Hanbury
- 15.00-15.20 XRCE's Participation at Patent ImageClassification and Image-based PatentRetrieval Tasks of the Clef-IP 2011, G. Csurka, J.-M.Renders and G. Jacquet
- 15.20-16.00 Discussion: Classification and Image tasks at CLEF-IP, Present and Future

#### PAN LAB, Workshop Program, Wednesday, September 21

- 10.30-10.55 Multilingual Vandalism Detection using Language-Independent & Ex Post Facto Evidence, A. West and I. Lee
- 10.55-11.10 Overview of the International Authorship Identification Competition at PAN-2011, S. Argamon and P. Juola
- 11.10-11.35 A Multitude of Linguistically-rich Features for Authorship Attribution, L. Tanguy, A. Urieli, B. Calderone, N. Hathout, and F. Sajous





- 11.35-12.00 Author Identification Using Semi-supervisedLearning, I. Kourtis and E. Stamatatos
- 12.00-12.15 Authorship Identification with Modality Specific Meta Features, T. Solorio, S. Pillay and M. Montes-Y-Gómez
- 12.15-12.30 Authorship Identification in Large Email Collections: Experiments Using Features that Belong to Different Linguistic Levels, G.K. Mikros and K. Perifanos
- 12.30-14.00 Lunch
- 14.00-14.15 Improved Implementation for Finding Text Similarities in Large Collections of Data, J. Grman and R. Ravas
- 14.15-14.30 Authorship Attribution of E-mail as a Multi-Class Task, K. Luyckx
- 14.30-15.10 Forensic Plagiarism Detection and Authorship Attribution: On the Linguists' Achievements and the Challenges for Computerized Analysis, M.T. Turell and M. Coulthard
- 15.10-16.00 Panel discussion

#### Thursday, September 22

- 09.00-09.25 Vote/Veto Meta-Classifier for AuthorshipIdentification, R. Kern, C. Seifert, M. Zechner, and M. Granitzer
- 09.25-09.40 Overview of the 3rd International Competition on Plagiarism Detection, M. Potthast, A. Eiselt, A. Barrón-Cedeño, B. Stein, and P. Rosso
- 09.40-10.05 Approaches for Intrinsic and External Plagiarism Detection, G. Oberreuter, G. L'Huillier, S. Ríos, and J. Velásque
- 10.05-10.30 Intrinsic Plagiarism Detection Using Character Trigram Distance Scores, M. Kestemont, K. Luyckx and W. Daelemans
- 10.30-10.45 The Encoplot Similarity Measure for Automatic Detection of Plagiarism, C. Grozea and M. Popescu
- 10.45-11.00 External Plagiarism Detection using Information Retrieval and Sequence Alignment, R.M. Adeel Nawab, M. Stevenson and P. Clough

#### QA4MRE Lab, Workshop Program, Tuesday September 20

10.30-10.40 Welcome, Pamela Forner, CELCT, Italy





- 10.40-11.10 Methodology and Results of QA4MRE 2011, A. Rodrigo, UNED, Madrid
- 11.10-11.30 Processing Modality and Negation, R. Morante, University of Antwerp, Belgium
- 11.30-12.30 Text Mining in Biograph, W. Daelemans, University of Antwerp, Belgium
- 12.30-14.00 Lunch
- A Hybrid Question Answering System based on Information Retrieval and Answer Validation, P. Pakray
- Dependency-Based Answer Validation for German, J. Pawellek and A. Henn
- The Loganswer Project at QA4MRE 2011, I. Glöckner
- Question Answering for Machine Reading Evaluation on Romanian and English Languages, A. Iftene

Discussion

#### **Wednesday September 21**

10.30-12.30 Breakout session

\_\_\_\_\_\_

#### LogCLEF Lab, Workshop Program, Wednesday, September 21

14.00-14.30 DAEDALUS at LogCLEF 2011: Analyzing Query Success and User Context, S. Lana-Serrano, J. Villena-Román, and J.C. González-Cristóbal

14.30-15.00 Interface Language, User Language and Success Rates in The European Library, M. Gäde, J. Stiller, V. Petras, and R. Berendsen

15.00-15.30 Adapting Statistical Language Identification Methods for Short Queries, A.-L. Gînsc□, E. Boro, A. Iftene

15.30-16.00 University of Essex at LogCLEF 2011: Studying Query Refinement, M.-D. Albakour and U. Kruschwitz

16.00-16.30 Coffee break

#### Thursday, September 22

09.00-11.00 Breakout session

\_\_\_\_\_\_





#### MusiCLEF Lab, Workshop Program, Thursday September 22

09.00-09.05	Introduction to MusiCLEF
09.05-09.25	Professional partners, D. Rizo
09.25-09.55	MIR community approaches related to our tasks, N. Orio
09.55-10.05	Involvement of the CLEF community, N. Orio
10.05-10.35 A. Leahu	Organization in the first year, D. Rizo, N. Montecchio, A. Iftene, A. Rusu, and
10.35-10.45	What we expect for next year, D. Rizo
10.45-11.15	Open discussion with participants, D. Rizo

\_\_\_\_\_\_

### CHiC Workshop Program, Tuesday September, 20

10.30-10.45 Introduction

10.45-11.20 User-centric approaches to annotating and presenting the audiovisual memory of the Netherlands, J. Oomen

11.20-11.55 Evaluation of Cultural Heritage Digital Collections: The DiLEO Perspective, C. Papatheodorou

11.55-12.30 Searching Digital Heritage: Putting IR Evaluation in Context, J. Kamps

12.30-14.00 Lunch

14.00-14.20 Overview: Interaction Patterns and Evaluation. Efforts in the Cultural Heritage Domain

14.20-15.00 Participants Statements

15.00-16.00 Interactive Discussion: Roadmap for Alternative Evaluation & Proposal of a First Evaluation Taskin the Cultural Heritage Domain

16.00-16.30 Coffee break





# **Appendix E: List of people attending the Event**

FIRSTNAME	FAMILYNAME	COMPANY	COUNTRY
M-Dyaa	Abakour	University of Essex	United Kingdom
karam	Abdulahhad	LIG / UJF	France
frederic	Agnes	compilatio	France
Mitra	Akasereh	University of Neuchâtel	Switzerland
F. Gediz	Aksit	Maastricht University	Belgium
Adil	Alpkocak	Dokuz Eylul University	Turkey
Enrique	Amigó	UNED	Spain
Sameer	Antani	National Library of Medicine	United States of America
Erchan	Aptoula	Okan University	Turkey
Krisztian	Balog	Norwegian University of Science and Technology Universidad Politécnica de	Norway
Alberto  Daniela	Barrón-Cedeño	Valencia	Spain
Steven	Becks Bedrick	University of Hildesheim Oregon Health & Science University	Germany United States of America
Richard	Berendsen	University of Amsterdam	Nederland
Thomas	Boettcher	BTU Cottbus Zurich University of Applied	Germany
Martin	Braschler	Sciences	Switzerland
Pavel	Braslavski	Yandex	Russian Federation
Petra  Basilio	Budikova  Calderone	Masaryk University CLLE-ERSS (UMR 5263) CNRS & Université de Toulouse-Le Mirail	Czech Republic France
Angel	Castellanos	UNED	Spain
Esteban	Castillo Juarez	Benemérita Universidad Autónoma de Puebla	Mexico
Guillaume	Cerutti	LIRIS	France
Henry	Cooke	University of Plymouth	United Kingdom
Neil	Cooke	University of Surrey	United Kingdom
Mariano	Crespo	Universidad de Huelva	Spain
eva	D'hondt	Radboud university Nijmegen	Nederland
Bálint Zoltán	Daróczy	MTA SZTAKI, Hungarian Academy of Sciences	Hungary
	De Paepe	European Patent Office	Nederland





Maarten	De Rijke	University of Amsterdam	Nederland
Dina	Demner Fushman	National Library of Medicine	United States of America
Emanuele	Di Buccio	University of Padua	Italy
Giorgio Maria	Di Nunzio	University of Padua	Italy
Duy	Dinh	IRIT laboratory	France
Marco	Dussin	University of Padua	Italy
Gunnar	Eriksson	SICS	Sweden
Nicola	Ferro	University of Padua	Italy
PAMELA	Forner	CELCT	Italy
Santosh Maria	Gadde Gaede	International Institute of Information Technology Humboldt-Universität zu Berlin	India Germany
Viktor	Gal	University Gent	Belgium
Miguel Ángel Alba	García Cumbreras  García Seco de Herrera	University of Jaén University of Applied Sciences Western Switzerland	Spain Switzerland
	Garcia Serrano	UNED	Spain
Lee	Gillam	University of Surrey	United Kingdom
Yiannis	Gkoufas	Athens University of Economics and Business	Greece
Ingo	Glöckner	University of Hagen	Germany
Hervé	Goëau	Inria	France
	Gonnet	ETH	Switzerland
Julio	Gonzalo	UNED	Spain
Guido Lorenzo	Granato	Rome University La Sapienea	Italy
Jan	Grman	SVOP Ltd.	Slovak Republic
Franc	Grootjen	Radboud University Nijmegen	The Netherlands
Cristian	Grozea	Fraunhofer Institute FIRST	Germany
Juncal	Gutiérrez-Artacho	University of Granada	Spain
Harald	Hammarstrom	Radboud U Nijmegen	Nederland
Allan	Hanbury	Vienna University of Technology	Austria
Preben	Hansen	SICS	Sweden
Donna	Harman	National Institute of Standards and Technology - NIST	United States of America
Christopher	Harris	The University of Iowa	United States of America
Alexander	Henn	University Heidelberg	Germany





ALI	Hosseinzadeh Vahid	Dokuz Evlul University	Turkey
Bouke	Huurnink	Dokuz Eylul University University of Amsterdam	Nederland
		-	
Adrian	Iftene .	Al.I.Cuza University	Romania
Anni	Izawa Järvelin	Meiji University Swedish Institute of Computer Science	Japan Sweden
Hideo	Joho	University of Tsukuba	Japan
Alexis	Joly	INRIA	France
Gareth	Jones	Dublin City University	Ireland
Julia	Juergens	University of Hildesheim	Germany
Patrick	Juola	Duquesne University	United States of America
Theodore	Kalamboukis	Athens University of Economics and Business	Greece
Jussi	Karlgren	SICS	Sweden
Jaana	Kekalainen	University of Tampere	Finland
Roman	Kern	Know-Center	Austria
Mike	Kestemont	University of Antwerp	België
Roger	King	Mississippi State University	United States of America
Jana	Kludas	University of Geneva	Switzerland
	Koppel	Bar-Ilan University	Israel
Perifanos	Kostas	University of Athens	Greece
Sven	Krause	European Patent Office	Nederland
Amel	Ksibi	ENIS	Tunisia
Mounia	Lalmas	Yahoo! Research	Spain
Sara	Lana Serrano	UPM - Technical University of Madrid	Spain
Birger	Larsen	Royal School of Library and Information Science	Denmark
Mikhail	Lebedev	Yandex	Russian Federation
Johannes	Leveling	Dublin City University	Ireland
Michael	Lew	Leiden university	Nederland
ningning	Liu	ecole centrale de lyon	France
Mihai	Lupu	Vienna University of Technology	Austria
Kim	Luyckx	CLiPS Computational Linguistics Group, University of Antwerp	Belgium
Parvaz	Mahdabi	University of Lugano	Switzerland
Thomas	Mandl	Universität Hildesheim	Germany





	T		T
Ivano	Masiero	University of Padua	Italy
Jacinto	Mata	Universidad de Huelva	Spain
James	Mayfield	Johns Hopkins University	United States of America
Eugene Muki	Mbanya	Fraunhofer HHI	Germany
Edgar	Meij	University of Amsterdam	Nederland
George	Mikros	National and Kapodistrian University of Athens	Greece
Roland	Moerzinger	JOANNEUM RESEARCH	Austria
Jean-François	Molino	Institut de Recherche pour le Développement	France
Nicola	Montecchio	University of Padova	Italy
Manuel	Montes	INAOE	Mexico
Roser	Morante	University of Antwerp	Belgium
naoki	Motohashi	Meiji University	Japan
Henning	Müller	HES-SO	Switzerland
Rao Muhammad Adeel	Nawab	University of Sheffield	United Kingdom
Stefanie	Nowak	Fraunhofer IDMT	Germany
Gabriel	Oberreuter	Universidad de Chile	Chile
María-Dolores	Olvera-Lobo	Universidad de Granada	Spain
Yurii	Palkovskii	Zytomyr Sate University, SkyLine, Inc.	Ukraine
Roberto	Paredes	ITI - UPV	Spain
Jan	Pawellek	Heidelberg University	Germany
Maria-Hendrike	Peetz	UvA	The Netherlands
Anselmo	Peñas	UNED	Spain
Carol Ann	Peters	ISTI-CNR	Italy
Róbert	Pethes	MTA SZTAKI	Hungary
Vivien	Petras	Humboldt-Universität zu Berlin	Germany
Emanuele	Pianta	CELCT	Italy
laure	Pillet	compilatio	France
Florina	Piroi	Technical University Vienna	Austria
Adrian	Popescu	CEA	France
Martin	Potthast	Bauhaus-Universität Weimar	Germany
Mahmudur	Rahman	National Library of Medicine at NIH	United States of America
Alvaro	Rodrigo	NLP&IR group at UNED	Spain
Paolo	Rosso	Universidad Politecnica Valencia	Spain





		T	
Miguel	Ruiz	Emporia State University	United States of America
Koen	Sande	University of Amsterdam	Nederland
Giuseppe	Santucci	University of Rome	Italy
Anne	Schuth	Univeristy of Amsterdam	Nederland
Thamar	Solorio	University of Alabama at Birmingham	United States of America
Damiano	Spina	UNED	Spain
Efstathios	Stamatatos	University of the Aegean	Greece
Benno	Stein	Bauhaus-Universität Weimar	Germany
Juliane	Stiller	Humboldt-Universität zu Berlin	Germany
Ludovic	Tanguy	CLLE - University of Toulouse & CNRS	France
Bart	Thomee	Yahoo! Research	Spain
Giuseppe	Tino	Università degli studi di Roma La Sapienza"	Italy
Kalifa	Traoré	Association des langues parlées au Mali ALPM	Mali
Theodora	Tsikrika	Univ. of Applied Sciences, Western Switzerland	Switzerland
L. Alfonso	Ureña-López	University o Jaén	Spain
Assaf	Urieli	Univ de Toulouse le Mirail	France
Juan	Velasquez	University of Chile	Chile
Darnes	Vilariño Ayala	Universidad Autónoma de Puebla	Mexico
Julio	Villena-Román	Universidad Carlos III de Madrid	Spain
Ellen	Voorhees	NIST	United States of America
Stefanos	Vrochidis	Informatics and Telematics Institute	Greece
Wouter	Weerkamp	University of Amsterdam	Nederland
Andrew	West	University of Pennsylvania	United States of America
Christa	Womser-Hacker	University of Hildesheim	Germany
David	Zellhöfer	BTU Cottbus	Germany
yu	Zhang	ecole centrale de lyon	France
Johan	Oomen	Netherlands Institute for Sound and Vision	The Netherlands
Jaap	Kamps	University of Amsterdam	The Netherlands
Christos	Papatheodorou	Ionian University	Greece
Manisha	Verma	International institute of information technology (IIIT Hyderabad)	India





Jungyeul	Park	ELDA	France
Pinaki	Bhaskar	Jadavpur University	India
Tolga	Berber	Dokuz Eylul University	Turkey
llés	Solt	Budapest University of Technology and Economics	Hungary
Fang	Xu	Saarland University	Germany
Lefteris	Xioufis	Aristotle University of Thessaloniki	Greece
Gabriel	Oberreuter	Universidad de Chile	Chile
Esteban	Castillo Juarez	Benemérita Universidad Autónoma de Puebla	Mexico
Neil	Cooke	University of Surrey	United Kingdom
Christopher	Harris	The University of Iowa	United States of America
Stefano	Bertolo	European Commission	Luxembourg
Jana	Kludas	University of Geneva	Switzerland
Elaine	Toms	University of Sheffield	United Kingdom
Omar	Alonso	Microsoft	United States
M-Dyaa	Abakour	University of Essex	United Kingdom
Nicola	Orio	University of Padua	Italy
M.Teresa	Turell Julià	Universitat Pompeu Fabra	Italy
Walter	Daelemans	University of Antwerp Belgium	





# **Appendix F: List of Participating Institutions to the Labs**

Affiliation	Country	PAN	CLEF-IP	Image-CLEF	QA4MRE	LogCLEF	MusiCLEF
AL.I.Cuza University	Romania	х		x	x	Х	×
AUEB	Greece			х			
Bar-Ilan University	Israel	х					
Benemérita Universidad Autónoma de Puebla	Mexico	х					
Brandenburgische Technische Universität Cottbus	Germany			х			
BUAA AUDR	China			x			
Buffalo University	USA			x			
Ca' Foscari University	Italy				х		
CEA	France			X			
Chemnitz University of Technology	Germany		x				
CNRS	France	х					
Daedalus	Spain			X		Х	
DA-IICT	India	Х			х		
DEMIR	Turkey			Х			
Dublin City University	Ireland					x	
Duquesne University	USA	х					
DUTH	Greece			x			
EC Lyon	France			x			
École Polytechnique Fédérale de Lausanne	Switzerland					x	
Fraunhofer HHI	Germany			х			
Fraunhofer Institute, FIRST	Germany	х					
Fudan University	China				Х		
Hewlett-Packard	Russian Federation		x				
HITEC	Hungary			х			
Hitsz	China					х	
Humboldt University Berlin	Germany					х	
Hungarian Academy of Sciences	Hungary			x			
IDMT, Fraunhofer	Germany			x			
IES "José Caballero"	Spain	х					





	1		1		_		1
IFSCC USP	Brasil			х			
IIIT Hydereabad	India					х	
INRIA Rocquencourt	France			x			
Institue for Infocomm Research	Singapore					х	
Institute de Recherce en Informatique de							
Toulouse	France					Х	
IRIT	France			X			
Jadavpur University	India	Х			Х		
Joanneum	Austria		Х				
Know-Center	Austria	X					
LAPI	Romania			х			
LIMSI-CNRS	France				x		
LIRIS Lyon	France			x			
Maastricht University	The Netherlands	х					
MedGIFT	Switzerland			х			
Meiji	Japan			х			
MLKD	Greece			х			
MRIM, IMAG	France			х			
MUFIN	Czech Republic			x			
National Institute of Informatics	Japan			х			
National Institutes of Health	USA			x			
NEC Laboratories America	USA				х		
Porfiau	Canada	x					
Radboud University Nijmegen	The Netherlands		х		х		
ReDCAD	Tunisia			х			
REGIMVID	Tunisia			x			
RMIT	Australia			x			
RWTH Aachen	Germany			Х			
Sabanci University	Turkey			X			
Science and Research University Tehran	Islamic Republic of Iran					х	
SFSU	USA			х			
SIEL IIIT-H	India		Х				
SINAI	Spain			х			
SVOP Ltd.	Slovakia	Х					
Technische Universität Berlin	Germany			х			





	<u> </u>	1	1	1		1	1
The Open University	England			Х			
UNED	Spain			х	Х		
Unicamp	Brasil			x			
Universidad Autonoma de Nuevo Leon	Mexico	х					
Universidad de Chile	Chile	х				х	
Universidade de Évora	Mexico				х		
Università di Trento	Italy					x	
Université de Toulouse II - Le Mirail	France					x	
University Koblenz- Landlau	Germany				х		
University of Alabama at Birmingham	USA	х					
University of Alicante	Spain						х
University of Amsterdam	The Netherlands			х		x	
University of Antwerp	Belgium	х					
University of Athens	Greece	х					
University of Caen	Spain			х			
University of Electronic Science and Technology of							
China	China United			X			
University of Essex	Kingdom					х	
University of Hagen	Germany				X		
University of Heidelberg	Germany				х		
University of Hildesheim	Germany					х	
University of Huelva	Spain			Х			
University of Kaiserslautern	Germany			х			
University of Lugano	Switzerland		Х				
University of Padua	Italy						х
University of North Texas	USA			х			
University of Pennsylvania	USA	х					
University of Sheffield	United Kingdom	х					
	United						
University of Surrey	Kingdom	Х					
University of the Aegean	Greece	x					





Working Notes Papers <sup>5</sup> : 89		22	8	44	9	4	2
TOTAL Institutions: 96		24	8	44	13	16	3
Zhytomyr State University, SkyLine. Inc.	Ukraine	х					
Xerox Research Center Europe	France		x	x			
WISEnut Inc.	Republic of Korea		x				
University of Toulouse	France	х					

\_

 $<sup>^{\</sup>rm 5}$  These numbers include only the reports of the participants in the evaluation campaigns.





### **Appendix G: CLEF 2011 Sponsors**

CLEF 2011 benefited from the support of the following organizations:



Center for Creation, Content and Technology, University of Amsterdam, The Netherlands



**CHORUS+** Coordinated Action



City of Amsterdam, The Netherlands



ELIAS Research Network Programme



European Language Resources Association, France



European Science Foundation, France



INRIA: National Institute for Research in Computer Science and Control, France

Research

Microsoft Research







Netherlands Institute for Sound and Vision, The Netherlands



Netherlands Organization for Scientific Research, The Netherlands



Peta Media, The Netherlands



PROMISE Network of Excellence



University of Amsterdam, The Netherlands

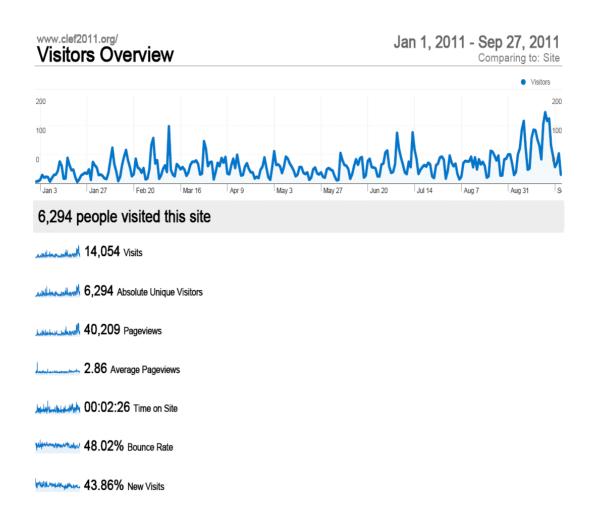


Xerox Research Centre Europe, France





# **Appendix H: CLEF 2011 Website Statistics**

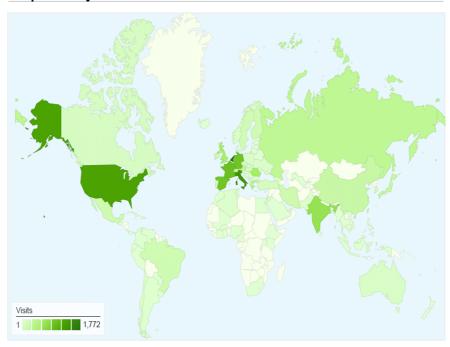






www.clef2011.org/ **Map Overlay** 

Jan 1, 2011 - Sep 27, 2011 Comparing to: Site



### 14,054 visits came from 107 countries/territories

Visits Pages/Visit 2.86 % of Site Total: 100.00% Site Avg: 2.86 (0.00%)  Country/Territory		Avg. Time on Site 00:02:26 Site Avg: 00:02:26 (0.00%)		% New Visits 43.91% Site Avg: 43.86% (0.11%)	<b>48.02</b> Site Avg:	Bounce Rate 48.02% Site Avg: 48.02% (0.00%)	
		Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate	
Netherlands		1,772	3.05	00:02:34	28.50%	43.06%	
Italy		1,382	4.23	00:03:42	28.36%	44.57%	
United States		1,247	2.50	00:01:49	55.41%	50.60%	
France		997	2.83	00:02:23	42.73%	47.04%	
Germany		958	3.07	00:02:58	44.99%	43.53%	
Spain		955	2.86	00:02:13	40.00%	45.03%	
India		698	2.45	00:02:14	52.58%	48.14%	
Romania		598	2.23	00:02:13	40.64%	56.52%	
United Kingdom		553	2.66	00:02:07	40.87%	56.42%	