

## Preface

The CLEF 2017 conference is the eighteenth edition of the popular CLEF campaign and workshop series which has run since 2000 contributing to the systematic evaluation of multilingual and multimodal information access systems, primarily through experimentation on shared tasks. In 2010 CLEF was launched in a new format, as a conference with research presentations, panels, poster and demo sessions and laboratory evaluation workshops. These are proposed and operated by groups of organizers volunteering their time and effort to define, promote, administrate and run an evaluation activity.

CLEF 2017<sup>1</sup> was hosted by the ADAPT Centre<sup>2</sup>, Dublin City University and Trinity College Dublin from the 11th to 14th September 2017. This year's conference was also co-located with MediaEval<sup>3</sup> and the program included joint sessions between both MediaEval and CLEF to allow for cross fertilisation.

Eight laboratories and two workshops were selected and run during CLEF 2017. To identify the best proposals, besides well-established criteria from previous years' editions of CLEF such as topical relevance, novelty, potential impact on future world affairs, likely number of participants, and the quality of the organizing consortium. This year we further stressed the connection to real-life usage scenarios and we tried to avoid as much as possible overlaps among labs in order to promote synergies and integration.

The Labs at CLEF 2017, building on previous experience, demonstrate the maturity of the CLEF evaluation environment via the incorporation of new tasks, new and larger data sets, new ways of evaluation or more languages. Details of the individual Labs are described by the Lab organizers in these proceedings, here we just provide brief comment on each one.

**News Recommendation Evaluation Lab (NEWSREEL)**<sup>4</sup> provides a vehicle for the IR/recommender system communities to move from conventional offline evaluation to online evaluation. We address the following information access challenge: Whenever a visitor of an online news portal reads a news article on their side, the task is to recommend other news articles that the user might be interested in.

**LifeCLEF**<sup>5</sup> aims at boosting research on the identification of living organisms and on the production of biodiversity data in general. Through its biodiversity informatics related challenges, LifeCLEF is intended to push the boundaries

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<sup>1</sup> <http://clef2017.clef-initiative.eu/>

<sup>2</sup> <http://adaptcentre.ie/>

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

<sup>4</sup> <http://clef-newsreel.org/>

<sup>5</sup> <http://www.lifeclef.org/>

of the state-of-the-art in several research directions at the frontier of multimedia information retrieval, machine learning and knowledge engineering.

**Uncovering Plagiarism, Authorship and Social Software Misuse (PAN)**<sup>6</sup> provides evaluation of uncovering plagiarism, authorship, and social software misuse. PAN offers three tasks at CLEF 2017 with new evaluation resources consisting of large-scale corpora, performance measures, and web services that allow for meaningful evaluations. The main goal is to provide for sustainable and reproducible evaluations, to get a clear view of the capabilities of state-of-the-art-algorithms. The tasks are: author identification; author profiling; and, author obfuscation.

**CLEFeHealth**<sup>7</sup> provides scenarios which aim to ease patients and nurses understanding and accessing of eHealth information. The goals of the lab are to develop processing methods and resources in a multilingual setting to enrich difficult-to-understand eHealth texts, and provide valuable documentation. The tasks are: multilingual Information extraction; technologically assisted reviews in empirical medicine; and, patient-centred information retrieval.

**Cultural Microblog Contextualization (CMC) Workshop**<sup>8</sup> deals with how cultural context of a microblog affects its social impact at large. This involves microblog search, classification, filtering, language recognition, localization, entity extraction, linking open data and summarization. Regular Lab participants have access to the private massive multilingual microblog stream of The festival galleries project.

**ImageCLEF**<sup>9</sup> organises 3 main tasks with a global objective of benchmarking lifelogging retrieval and summarization, tuberculosis type prediction from CT images and bio-medical image caption prediction; and a pilot task on remote sensing image analysis.

**Early risk prediction on the Internet (eRisk)**<sup>10</sup> explores issues of evaluation methodology, effectiveness metrics and other processes related to early risk detection. Early detection technologies can be employed in different areas, particularly those related to health and safety. For instance, early alerts could be sent when a predator starts interacting with a child for sexual purposes, or when a potential offender starts publishing antisocial threats on a blog, forum or social network. Our main goal is to pioneer a new interdisciplinary research area that would be potentially applicable to a wide variety of situations and to many different personal profiles.

**Personalised Information Retrieval at CLEF (PIR-CLEF)**<sup>11</sup> provides a framework for evaluation of Personalised Information Retrieval (PIR). Current

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<sup>6</sup> <http://pan.webis.de/>

<sup>7</sup> <https://sites.google.com/site/clefehealth2017/>

<sup>8</sup> <https://mc2.talne.eu/>

<sup>9</sup> <http://imageclef.org/2017>

<sup>10</sup> <http://early.irlab.org/>

<sup>11</sup> <http://www.ir.disco.unimib.it/pirclef2017/>

approaches to the evaluation of PIR are user-centered, i.e., they rely on experiments that involve real users in a supervised environment, PiR-CLEF aims to develop and demonstrate a methodology for evaluation PIR which enables repeatable experiments to enable the detailed exploration of personal models and their exploitation in IR.

**Dynamic Search for Complex Tasks**<sup>12</sup> Information Retrieval research has traditionally focused on serving the best results for a single query – so-called ad hoc retrieval. However, users typically search iteratively, refining and reformulating their queries during a session. A key challenge in the study of this interaction is the creation of suitable evaluation resources to assess the effectiveness of IR systems over sessions. The goal of the CLEF Dynamic Search lab is to propose and standardize an evaluation methodology that can lead to reusable resources and evaluation metrics able to assess retrieval performance over an entire session, keeping the “user” in the loop.

**Multimodal Spatial Role Labeling**<sup>13</sup> explores the extraction of spatial information from two information resources that is image and text. This is important for various applications such as semantic search, question answering, geographical information systems and even in robotics for machine understanding of navigational instructions or instructions for grabbing and manipulating objects.

CLEF has been always backed by European projects which complement the incredible amount of volunteering work performed by Lab Organizers and the CLEF community with the resources needed for its necessary central coordination, in a similar manner to the other major international evaluation initiatives as TREC, NTCIR, FIRE and MediaEval. Since 2014, the organisation of CLEF no longer has direct support from European projects and working to transform itself into a self-sustainable activity. This is being made possible thanks to the establishment in late 2013 of the CLEF Association<sup>14</sup>, a non-profit legal entity, which, through the support of its members, ensures the resources needed to smoothly run and coordinate CLEF.

## Acknowledgments

We would like to thank the members of CLEF-LOC (the CLEF Lab Organization Committee) for their thoughtful and elaborate contributions to assessing the proposals during the selection process:

Martin Braschler, Zurich University of Applied Sciences, Switzerland  
Donna Harman, National Institute for Standards and Technology (NIST), USA  
Marteen de Rijke, University of Amsterdam, The Netherlands

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<sup>12</sup> <https://ekanou.github.io/dynamicsearch/>

<sup>13</sup> [http://www.cs.tulane.edu/~pkordjam/mSpRL\\_CLEF\\_lab.htm/](http://www.cs.tulane.edu/~pkordjam/mSpRL_CLEF_lab.htm/)

<sup>14</sup> <http://www.clef-initiative.eu/association>

Last but not least without the important and tireless effort of the enthusiastic and creative proposal authors, the organizers of the selected labs and workshops, the colleagues and friends involved in running them, and the participants who contribute their time to making the labs and workshops a success, the CLEF labs would not be possible.

Thank you all very much!

July, 2017

Linda Cappellato  
Nicola Ferro  
Lorraine Goeriot  
Thomas Mandl

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CLEF 2017, *Conference and Labs of the Evaluation Forum – Experimental IR meets Multilinguality, Multimodality, and Interaction*, was organized by the ADAPT Centre in Dublin City University and Trinity College, Dublin, Ireland.

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