



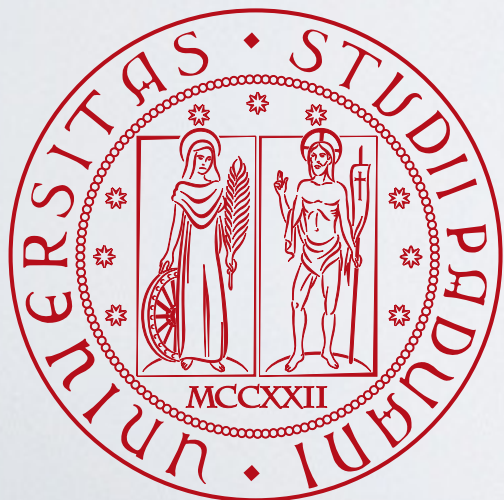
The CLEF Association

Conference and Labs of the Evaluation Forum

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



What's happening in CLEF and What's the Covid-19 @ MLIA Initiative



Nicola Ferro

 @frrncl

University of Padua, Italy

NTCIR

CLEF 2021



Lecture Notes in
Computer Science

LNCS

LNAI

LNBI

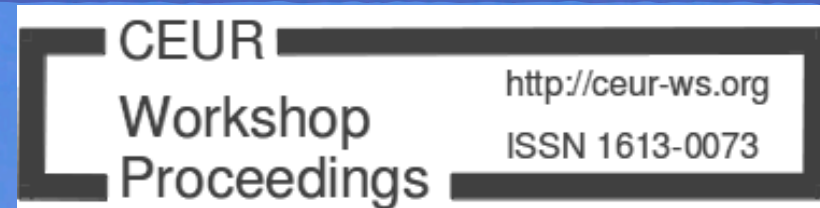
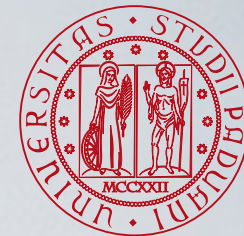
Full/Short Papers: 3 May 2021

Information Access in any language or modality
Analytics for Information Retrieval
Evaluation Initiatives
Evaluation Methodologies, metrics, statistics
Technology Transfer
Interactive Information Retrieval Evaluation
Specific Application Domains
New Data Collection
Work on data from rare languages



CLEF 2021: Conference

21-24 September 2021, Bucharest - Romania, <http://clef2021.clef-initiative.eu/>



<http://clef2021-labs-registration.dei.unipd.it/>

Answer Retrieval for Questions on Math (ARQMath)
BioASQ: Large-scale biomedical semantic indexing and question answering
CheckThat! Lab on Detecting Check-Worthy Claims, and Fake News
Cheminformatics Elsevier Melbourne University lab (ChEMU)
CLEF eHealth
Early Risk prediction on the Internet
ImageCLEF Multimedia Retrieval Challenge in CLEF
LifeCLEF: Multimedia Life Species Identification
Living Labs for Academic Search (LiLAS)
PAN Lab on Digital Text Forensics and Stylometry
SimpleText: (Re)Telling right scientific stories to non-specialists via text simplification
Touché: Argument Retrieval

● General Chairs

- **Bogdan Ionescu**, University "Politehnica" of Bucharest, Romania
- **K. Selcuk Candan**, Arizona State University, USA

● Program Chairs

- **Henning Müller**, University of Applied Sciences Western Switzerland, Switzerland
- **Lorraine Goeuriot**, Université Grenoble Alpes, France
- **Birger Larsen**, Aalborg University Copenhagen, Denmark

● Lab Chairs

- **Alexis Joly**, INRIA Sophia-Antipolis, France
- **Maria Maistro**, University of Copenhagen, Denmark
- **Florina Piroi**, Vienna University of Technology, Austria

● Lab Mentorship Chair

- **Lorraine Goeuriot**, Université Grenoble Alpes, France

● Proceedings Chairs

- **Guglielmo Faggioli**, University of Padua, Italy
- **Nicola Ferro**, University of Padua, Italy

Participation: Attendees

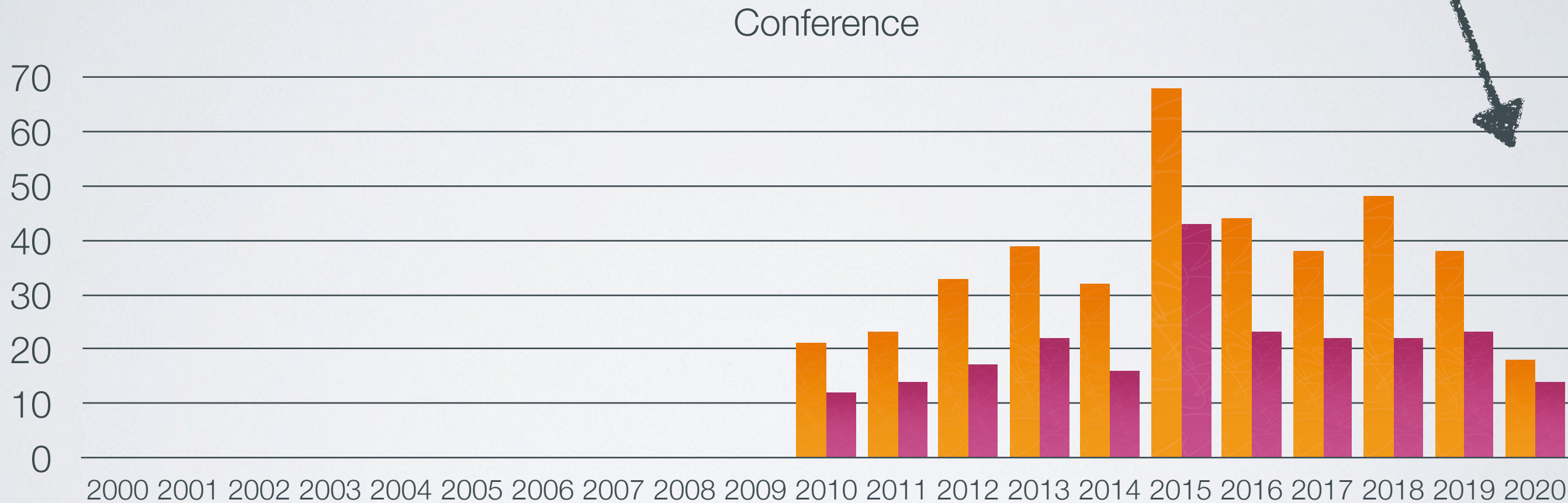
100% Voluntary Effort Based



Mainly voluntary effort + project funding

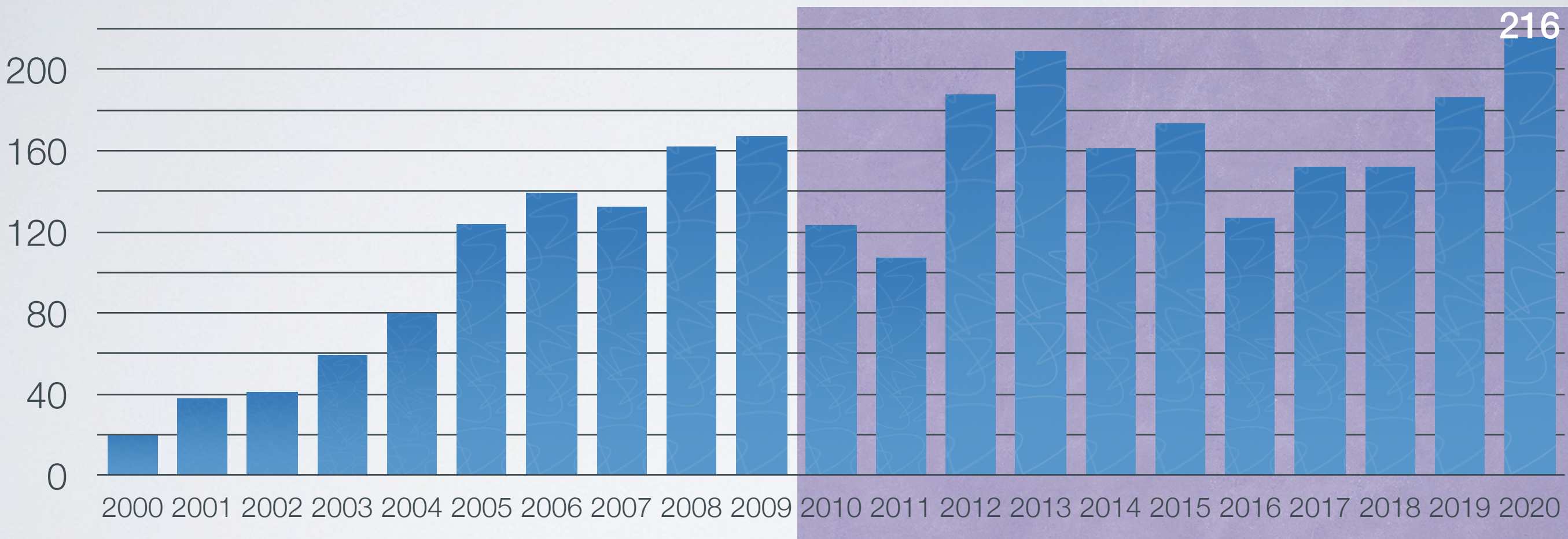
7 best of CLEF 2019 labs
7 full papers
2 short papers

Submitted Accepted



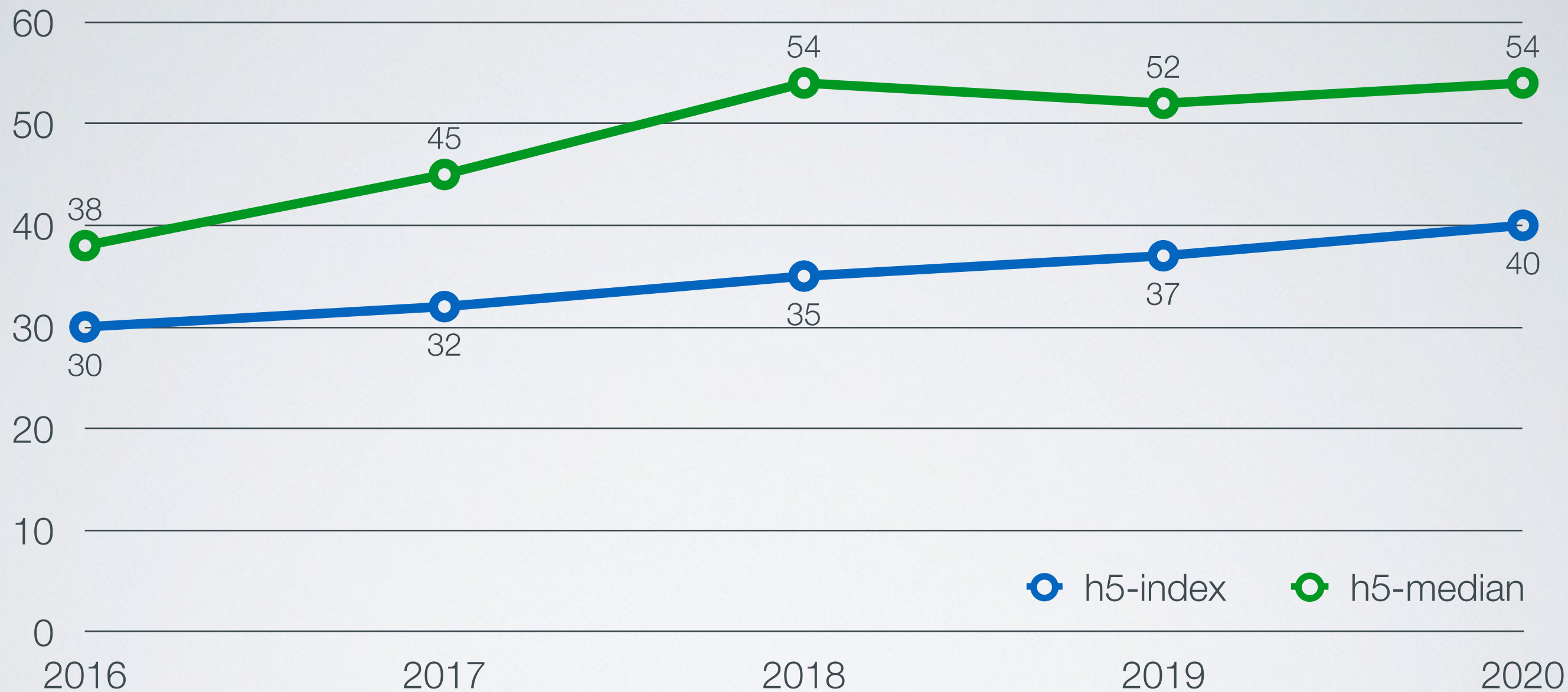
Working Notes

Working Notes Papers



Publication “Universe”

Google Scholar Metrics for “Cross-Language Evaluation Forum”



Google Scholar for “*CLEF evaluation*”

60,700 hits

Publication “Universe” (2020)

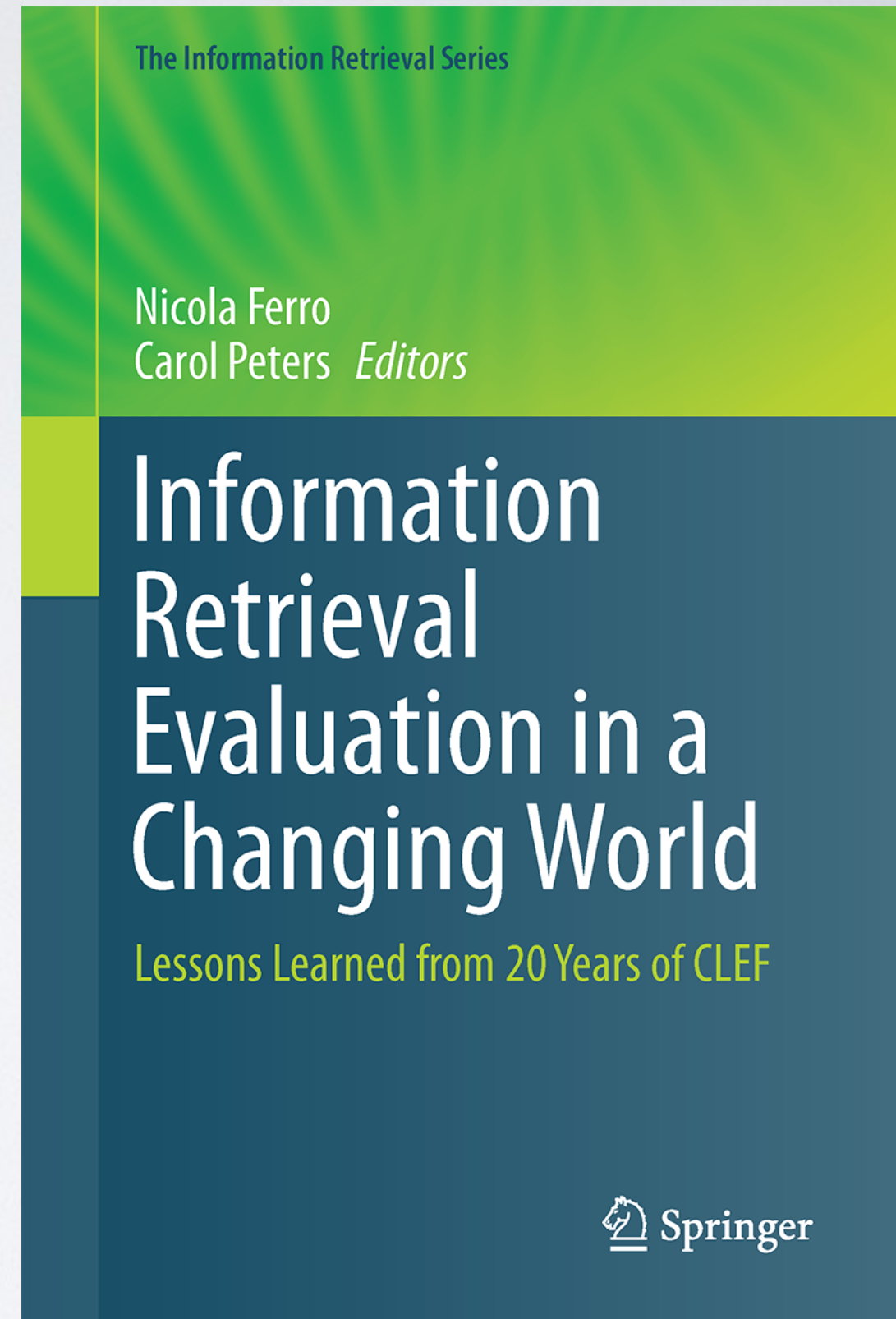
Google Scholar

Top publications

Categories > Engineering & Computer Science > Databases & Information Systems

Publication	h5-index	h5-median
1. IEEE Transactions on Knowledge and Data Engineering	81	117
2. International World Wide Web Conferences (WWW)	80	113
3. International Conference on Very Large Databases	70	102
4. ACM SIGMOD International Conference on Management of Data	66	96
5. ACM SIGIR Conference on Research and Development in Information Retrieval	57	97
6. International Conference on Data Engineering	56	79
7. ACM International Conference on Web Search and Data Mining	54	95
8. ACM International Conference on Information and Knowledge Management	54	88
9. International Conference on Web and Social Media (ICWSM)	48	71
10. ACM Conference on Recommender Systems	46	73
11. Information Processing & Management	46	71
12. Knowledge and Information Systems	43	60
13. Information Systems	41	71
14. IEEE International Conference on Big Data	41	52
15. Workshop of Cross-Language Evaluation Forum	40	54
16. ACM Transactions on Intelligent Systems and Technology (TIST)	39	65
17. IEEE Transactions on Big Data	38	58
18. International Semantic Web Conference	37	57
19. Semantic Web	36	56
20. Journal of Big Data	34	84

- Foreword by Donna Harman
- Part I – Experimental Evaluation and CLEF
- Part II – Evaluation Infrastructures
- Part III – Multilingual and Multimedia Information Retrieval
- Part IV – Retrieval in New Domains
- Part V – Beyond Retrieval
- Part VI – Impact and Future Challenges



Steering Committee Chair

- **Nicola Ferro**, University of Padua, Italy

Deputy Steering Committee Chair for the Conference

- **Paolo Rosso**, Universitat Politècnica de València, Spain

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- **Martin Braschler**, Zurich University of Applied Sciences, Switzerland

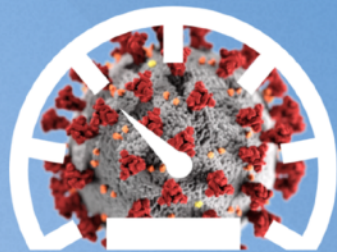
Members

- **Khalid Choukri**, Evaluations and Language resources Distribution Agency (ELDA), France
- **Paul Clough**, University of Sheffield, United Kingdom
- **Fabio Crestani**, Università della Svizzera italiana, Switzerland
- **Carsten Eickhoff**, Brown University, USA
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- **Jian-Yun Nie**, Université de Montréal, Canada
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- **Laure Soulier**, Pierre and Marie Curie University (Paris 6), France
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- **Christa Womser-Hacker**, University of Hildesheim, Germany

Past Members

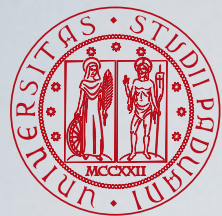
- **Djoerd Hiemstra**, Radboud University, The Netherlands
- **Jaana Kekäläinen**, University of Tampere, Finland
- **Séamus Lawless**, Trinity College Dublin, Ireland
- **Carol Peters**, ISTI, National Council of Research (CNR), Italy - CLEF SC Chair 2000-2009
- **Emanuele Pianta**, Centre for the Evaluation of Language and Communication Technologies (CELCT), Italy
- **Maarten de Rijke**, University of Amsterdam, The Netherlands
- **Alan Smeaton**, Dublin City University, Ireland



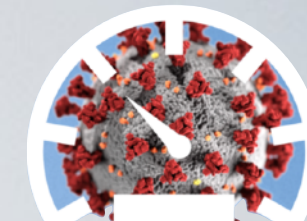
<http://eval.covid19-mlia.eu/>

 @covid19mlia

Covid-19 MLIA Eval



A community-based voluntary evaluation effort



Covid-19 MLIA Eval

DISCOVER

Aims and Scope

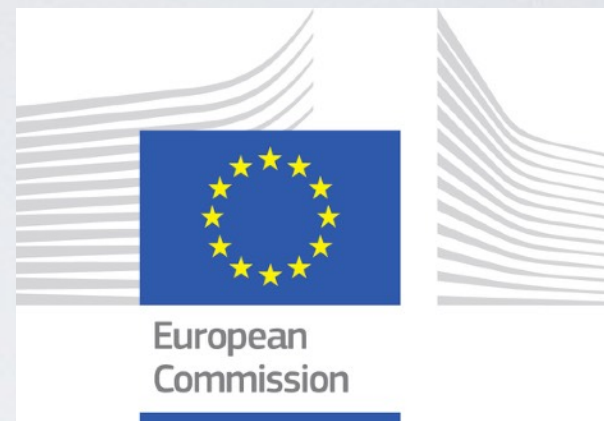
In the current Covid-19 crisis, as in many other emergency situations, the general public, as well as many other stakeholders, need to aggregate and summarize different sources of information into a single coherent synopsis or narrative, complementing different pieces of information, resolving possible inconsistencies, and preventing misinformation. This should happen across multiple languages, sources, and levels of linguistic knowledge that varies depending on social, cultural or educational factors.

Covid-19 MLIA Eval organizes a community evaluation effort aimed at accelerating the creation of resources and tools for improved MultiLingual Information Access (MLIA) in the current emergency situation with a reference to a general public use case:

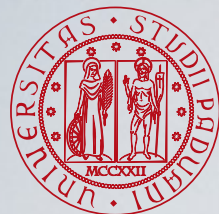


Sofia has heard that a drug has been experimented in different countries and she would like to have a consolidated and trustworthy view of the main findings, whether the drug is effective or not, and whether there are any adverse effects.

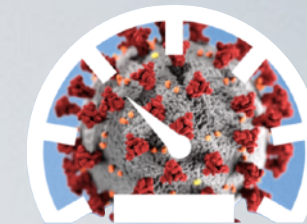
Distillation for the general public also implies a level of specialist-non-specialist communication, when the aggregated sources contain both disseminative and specialised sources. Therefore, the general public would need to understand medical expertise by using their correspondent in the "popular" language or by using an appropriately calibrated language for the communication to be effective.



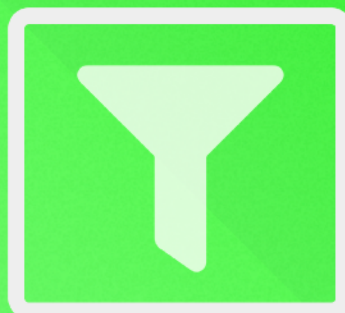
<http://eval.covid19-mlia.eu/>



Information Extraction



<http://eval.covid19-mlia.eu/task1/>



Information Extraction

Covid-19 MLIA Eval

DISCOVER

Task Description

The goal of the Information Extraction task is to identify medical information in texts. We defined six major types of entities to be identified. Those categories are mainly related to the Covid-19 issue. The main objective is to mine texts in order to access relevant information concerning the Covid-19, and more specifically information that may help the health professional to find outcomes.

During the first round of this task, participants will have access only to unannotated data (namely, the data collected from the two other tasks) in a plain text format. The evaluation will consist in a rover of system outputs. We encourage the participants to try experimental methods and to submit several system outputs in order to exchange different views during the discussion at the virtual meeting.

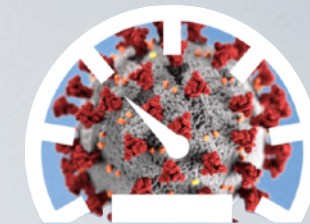
Categories

- **drug names, treatments, general intervention:** this category concerns both commercial and generic names of drugs, as well as general intervention in the health domain; elements from this category usually come from advices from a professional (medical doctor, pharmacist) or from self-medication
- **signs, symptoms, diseases:** this category deals with medical problems and merges together all signs, symptoms, and diseases shortness of breath, extreme fatigue, fever, skin infection, weight loss
- **findings, efficacy of treatments:** this category is more complex since it concerns all elements related to positive or negative effects of treatments, including non expected stuff
- **tests:** this category concerns all tests performed to diagnose medical problems such as blood sample, physical exam, serological test
- **behaviors, everyday life actions:** this category concerns all actions performed by each of us such as to wash one's hands, to cough into his elbow, to self-confine, use of face masks, physical distancing
- **legal dispositions, regulations:** this category concerns all actions decided by local or national authorities (Government, Ministry, etc.), such as to download the employer certificate, list of authorized move, prolonged border closure, closure of educational institutions

Languages

- English, French, German, Greek, Italian, Spanish, Swedish

Multilingual Semantic Search



<http://eval.covid19-mlia.eu/task2/>



Multilingual Semantic Search

Covid-19 MLIA  Eval

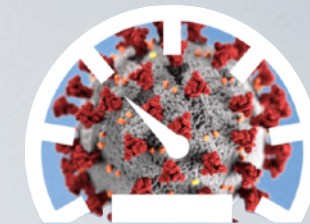
DISCOVER

Task Description

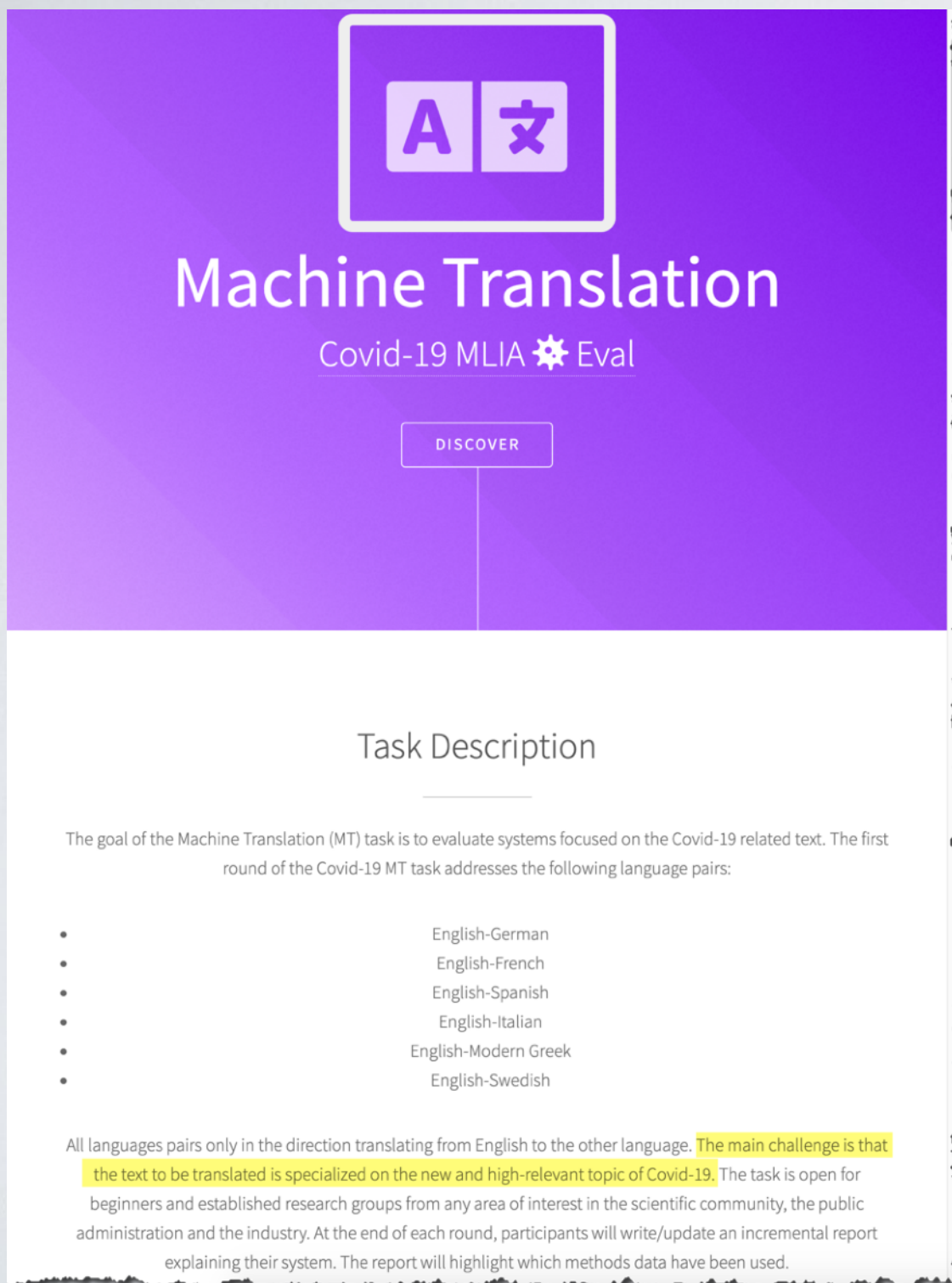
The goal of the Multilingual Semantic Search task is to collect relevant information for the community, the general public as well as other stakeholders, when **searching for health content in different languages and with different levels of knowledge** about the specific topic.

There will be two sub-tasks: subtask 1 is a classic **ad-hoc multilingual search task** focused more on high precision; subtask 2 is more oriented towards **high-recall systems, like Technology Assisted Review (TAR) systems.**

- **High Precision:** participants are required to build systems that will help the general public to retrieve the most relevant documents on the Web concerning COVID-19 efficiently. The main focus of this subtask is on the top ranked documents
- **High recall:** the focus is more on the problem of finding as many relevant documents as possible with the least effort. Given a limited amount of resources, such as a time limit and expert availability in time of crisis, there will be a limit on the maximum number of documents that can be retrieved in order to build a set of relevant documents that should be delivered to the general public.
- Both subtasks are open to **monolingual** and **bilingual** submissions
- Languages
 - English, French, German, Greek, Italian, Spanish, Swedish, and Ukrainian
- Topics
 - English, French, German, Greek, Italian, Spanish, Swedish, and Ukrainian plus Chinese and Japanese



<http://eval.covid19-mlia.eu/task3/>



Machine Translation
Covid-19 MLIA Eval

DISCOVER

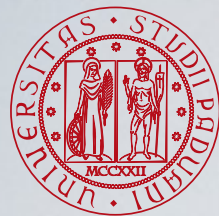
Task Description

The goal of the Machine Translation (MT) task is to evaluate systems focused on the Covid-19 related text. The first round of the Covid-19 MT task addresses the following language pairs:

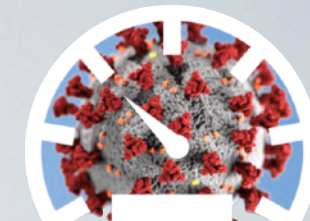
- English-German
- English-French
- English-Spanish
- English-Italian
- English-Modern Greek
- English-Swedish

All languages pairs only in the direction translating from English to the other language. The main challenge is that the text to be translated is specialized on the new and high-relevant topic of Covid-19. The task is open for beginners and established research groups from any area of interest in the scientific community, the public administration and the industry. At the end of each round, participants will write/update an incremental report explaining their system. The report will highlight which methods data have been used.

- **Constrained:** participants must submit at least a system trained only with the provided data (constrained) for each of the language pairs they would like to participate
Basic linguistic tools such as taggers, parsers, or morphological analyzers or multilingual systems are allowed in the constrained condition
- **Unconstrained:** participants can use additional training data (not provided by the organisers) or existing translation systems specifying a flag that the system uses additional data
- **Languages**
 - English-German
 - English-French
 - English-Spanish
 - English-Italian
 - English-Modern Greek
 - English-Swedish



Rounds, Repositories, Reports and Meetings



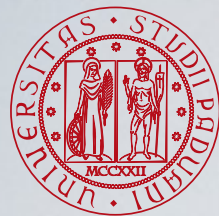
- We plan for **three rounds**, tentatively one-month long each, organized as follows:
 - **training (2 weeks)**: data will be released and you will develop your own systems;
 - **testing (2 weeks)**: you will submit your system runs, ground-truth will be created, and your runs will be scored;
 - **meeting (1 day)**: an interactive (remote) meeting will be organized where you will shortly present the highlights and downlights to accelerate knowledge transfer and take up for the next round.
- **Rolling technical report**: participants and organizers will keep and update a rolling technical report the techniques applied and insights gained during participation, round after round
- Participants are provided with a dedicated git **repository** where to push and share the outcomes of your participation in the different rounds, i.e. runs, code, (language) resources, and a technical report

<https://bitbucket.org/covid19-mlia/>

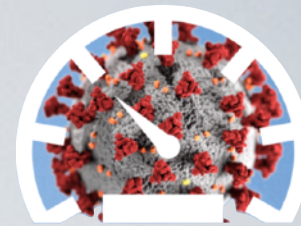
Repository	Description	Updated
organizers-task3 Evaluation	Organizers repository of the "Machine Translation" task of Covid-19 MLIA @ Eval effort. It contains d...	7 hours ago
etranslation Evaluation	Repository of participant eTranslation in the Covid-19 MLIA @ Eval effort.	3 days ago
prompt Evaluation	Repository of participant PROMT LLC in the Covid-19 MLIA @ Eval effort.	3 days ago
tilde Evaluation	Repository of participant Tilde in the Covid-19 MLIA @ Eval effort.	4 days ago
cunimt Evaluation	Repository of participant Charles University - MT Team in the Covid-19 MLIA @ Eval effort.	4 days ago
ims Evaluation	Repository of participant University of Padua in the Covid-19 MLIA @ Eval effort.	4 days ago
limsi Evaluation	Repository of participant TLP, CNRS-LIMS; in the Covid-19 MLIA @ Eval effort.	4 days ago
gnu Evaluation	Repository of participant Ganpat University- U. V. Patel College of Engineering; in the Covid-19 MLI...	4 days ago
tarjama-ai Evaluation	Repository of participant Tarjama FZ LLC in the Covid-19 MLIA @ Eval effort.	5 days ago
lc Evaluation	Repository of participant LC-Lab in the Covid-19 MLIA @ Eval effort.	5 days ago
cunimtir Evaluation	Repository of participant Charles University - MT&IR team in the Covid-19 MLIA @ Eval effort.	5 days ago
gatenlp Evaluation	Repository of participant University of Sheffield in the Covid-19 MLIA @ Eval effort.	5 days ago



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Where We are?



- **50 teams from 26 countries registered** to date, participating in multiple tasks

- 35 for the Information Extraction task
- 25 for the Multilingual Semantic Search task
- 25 for the Machine Translation task

- **We are in the middle of round 1**

- participants just submitted their runs
2 December 2020
- relevance assessments just started
due by mid December 2020
- preliminary participants reports
due by 23 December 2020
- virtual meeting
in the week 11-15 January 2021

- **14 teams from 10 countries actually submitted runs**

- 4 for the Information Extraction task

- English 4; German 1; Greek 1; Italian 1; Spanish 1

- 4 for the Multilingual Semantic Search task

- English 3; French 2; German 2; Greek 1; Italian 1; Spanish 3; Swedish 1; Ukrainian 1

- {German, French, Spanish, Swedish} → English 1

- English → German 1

- English → Spanish 1

- English → French 1

- 8 for the Machine Translation task

- English → German 5

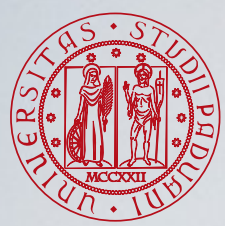
- English → French 8

- English → Spanish 6

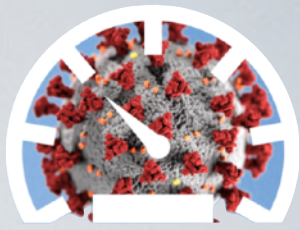
- English → Italian 4

- English → Greek 2

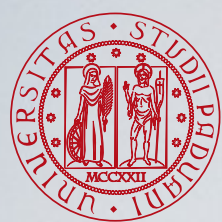
- English → Swedish 5



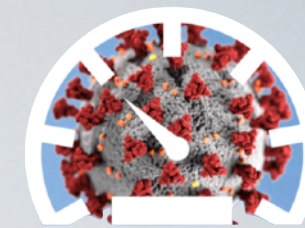
What's Next?



- Preparing for analysing participant runs
- Preparing for the virtual meeting
- Preparing for next round, roughly February-March 2021
 - new corpora
 - new topics
 - new languages
 - better training data available
 - cross-fertilisation between tasks



A Joint Effort



Coordinators

Overall

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Topic translation Relevance Assessment





JOIN US

<http://eval.covid19-mlia.eu/registration/>