

International Conference
**Language Technologies for All (LT4All):
Enabling Linguistic Diversity and Multilingualism Worldwide**
in the framework of
the 2019 International Year of Indigenous Languages
4 - 6 December 2019

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co-Chairs of LT4All 5-6 Decembre 2019



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Organizing Committee



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Organizing Committee (Day 2-3)

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- **Joseph Mariani**
Senior Researcher LIMSI-CNRS (France), Honorary President ELRA/ELDA (France)
- **Khalid Choukri**
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- **Gilles Adda**
Researcher, LIMSI-CNRS (France)
- **Irmgarda Kasinskaite-Buddeberg**
Programme specialist, UNESCO (France)



Introduction



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- Language Technologies are now widely spreading in everyday life in many applications
- But they still need more research
 - For more advanced applications
 - But also for better quality
 - And for more languages

- Nowadays, 100-150 languages benefit from Language Technologies , with very variable levels of quality
- This represents only 2% of the more than 7,000 languages that are spoken all over the world
- So, what shall we do for the remaining 98% ?

- The native speakers of those “under-resourced” languages are in a disadvantaged situation.
- It creates a digital divide, and the corresponding languages are in danger of digital extinction, if not complete extinction.

- The challenge of multilingualism is twofold
 - Preserving the cultures and the associated native languages
 - Allowing for communication across languages

Language Technologies are mandatory to allow for multilingualism

- Effect of Language Technologies is double
 - Languages that miss Language Technologies will be less and less used
 - Vocal assistant, car navigation, computer game, emergency calls,...
 - Languages that benefit from crosslingual technologies, such as Machine Translation, will be more and more used
 - Scientific papers: 96% of WoS in English

- **Everyone should be able to have access to workable Language Technologies in his/her “native language”, including “indigenous language”**

- MAAYA, World Network for Linguistic Diversity
 - WSIS (Tunis, 2005), ELRA Contribution
- Bamako International Forum on Multilingualism (2009)
- International Symposium on Multilingualism in Cyberspace
 - Brasilia (2011) and Paris (2012)
- Yakutsk International conference on Linguistic and Cultural Diversity in Cyberspace (2014)

- Proposal to Unesco of a World Summit on Multilingualism (2016)

- Late Indrajit Banerjee
 - Head of Knowledge Society Division at Unesco
- Met at WSIS 2017
- International Year of Indigenous Languages 2019
- Contact with Irmgarda Kasinskaite-Buddeberg

- Not a Summit, but an International Conference: LT4All
- Not on the whole of Multilingualism, but on LT to support Multilingualism
- Language Technologies for All
 - All languages, including Indigenous languages
 - All people, including Indigenous peoples

- Provide a Forum where representatives of
 - Language Policy makers: UNESCO, national and regional governments, NGOs, indigenous communities and language users
- Can meet
 - Language Technology providers, from the private sector and academia, linguists and industrials,
- from all over the world and address the various aspects dealing with the relationship between technology and language
- Including the Scientific, Technological, Linguistic, Economical and Political dimensions

- Unusual type of conference
 - Call for Papers, paper selection, registration fees (often expensive), own funding for travel and accommodation,...
 - On invitation, free registration, offer coffee and meals, provide grants to those who cannot afford travelling costs (often from countries remote from France)

- Need for funds
 - Cover the organizational costs and the travel grants
- Need for Sponsors
 - Warm thanks to our sponsors. We could not organize the conference without them.

Scientific Challenge

- How can we enlarge the linguistic coverage of Language Technologies ?
- Present technologies based on Machine Learning
 - Huge amount of language resources
 - Systems evaluation
- Same effort as for English ?
- Multilingual approach ?
- Language families ? Dialectal variants ?
- “Zero-resource approach” just as children learn language ?
- Languages convey the same meaning with different sounds, different words, different syntax: how to process meaning ?

Technical Program



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Program Highlight

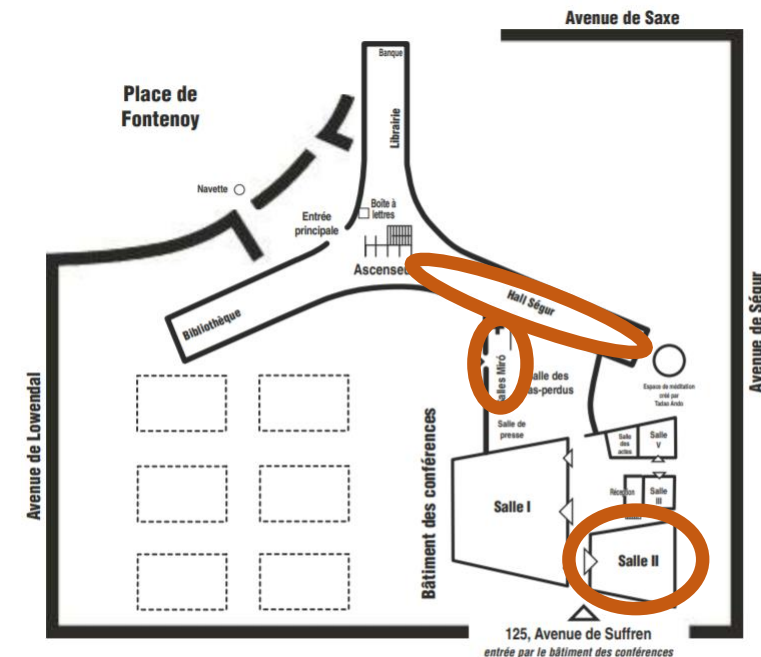
- LT4All will explore the relationship between **technologies** and **languages** from a scientific, technical, cultural, linguistic, economical and political perspective.



- The role of modern technologies shall change from **creating digital divide** to **creating digital opportunities: preservation, communication and education**

Program Structure

- **7 oral sessions (Room II):**
 - a series of six or seven 10-minute Introductory Talks,
 - a 30 or 35-minute panel discussion, including the speakers as panelists.
- **100 posters and 60 papers from 50 different countries (submitted within a month)**
 - **6 poster sessions on the various continents languages (Hall Ségur & Salles Miró)**
 - (1) Pacific, (2) European & Arctic,
 - (3) Latin America & the Caribbean,
 - (4) African, (5) Asian, and
 - (6) North America languages
- **Several booths and demos (Hall Ségur)**



LT4All Program at a Glance

- **DAY 1: CONTEXT**

- Multilingualism for Building Knowledge Societies

- **DAY 2: ACHIEVEMENTS**

- Innovative, Scientific, and Infrastructural Aspects of Language Technologies

- **DAY 3: CHALLENGES**

- Addressing the Digital Divide and Multilingualism

LT4All Program at a Glance (December 5th)

DAY 2: ACHIEVEMENTS Innovative, Scientific, and Infrastructural Aspects of Language Technologies	
09h00-10h30	Opening
10h30-11h00	Session Keynote1
11h00-11h30	Session P1: Pacific Languages Coffee Break
11h30-13h00	Session O5: Innovative aspects related to applications of Language Technologies in various areas, products and services
13h00-14h30	Session P2: European and Arctic Languages Lunch Break
14h30-16h15	Session O6: Scientific aspects related to the state of the art in Language Technologies, for spoken, written and sign languages
16h15-16h45	Session P3: Latin America and the Caribbean Languages Coffee Break
16h45-18h15	Session O7 Infrastructural aspects
18h30-20h30	Social event

LT4All Program at a Glance (December 6th)

DAY 3: CHALLENGES Addressing the Digital Divide and Multilingualism	
08h00-09h00	Registration
09h00-09h30	Session Keynote 2
09h30-11h00	Session O8: Minority and Indigenous Languages
11h00-11h30	Session P5: African Languages Coffee Break
11h30-13h00	Session O9: Activities for language preservation, reclamation, and enhancement
13h00-14h30	Session P6: Asian Languages Lunch Break
14h30-16h00	Session O10: Scientific aspects related to handling language diversity
16h00-16h30	Session P7: USA and Canada Languages Coffee Break
16h30-17h30	Session O11: Developing Language Technologies for All : Best Practices
17h30-18h30	Session O12: The Future of Language Technologies for All: Outcome Document and Recommendations
18h30-18h45	Closing Remarks

Last but not least, we will discuss an outcome document and recommendation to strategically design the next steps!

Presentation Guidelines

- **Oral Sessions**
 - **Speakers**
 - Please stay in your 10-minute time slot sharp
 - Allow more time for a discussion with the participants
 - **Panel Discussions**
 - All participants are welcomed to provide their questions
 - Especially we encourage for those who already provide written contributions
 - Please kindly not to use all the time only for your own questions
- **Poster Sessions**
 - **Speakers**
 - The posters have been printed, and will be installed and uninstalled, by the organizers
 - Provide short introduction and have a free discussion with the participants
 - **Others:** There are tables and plugs available.
Even you don't have any posters but want to make a demo; you are free to use it.

*We may come from different part of the worlds,
have different background and experiences,
speak in different language tongues,
but we will share our time together in this LT4All!*

*Let us embrace this special moment
to share our knowledge and experiences,
to discuss, and hopefully to collaborate
for a better future of language technologies and language diversity!*

Logistics



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How to find our ways !!

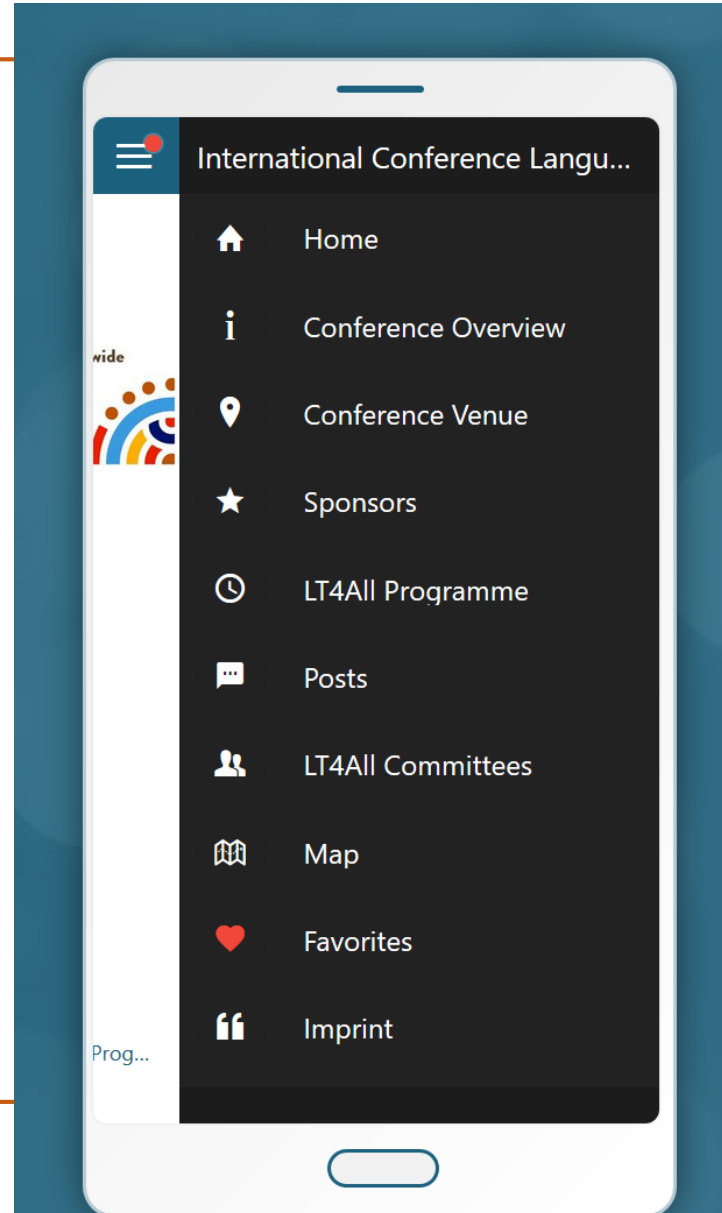
- There is an **LT4All App**
- It is usable offline

<https://lt4all.lineupr.com/lt4all>





All the topics ... D1 D2 D3



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Big Thank to



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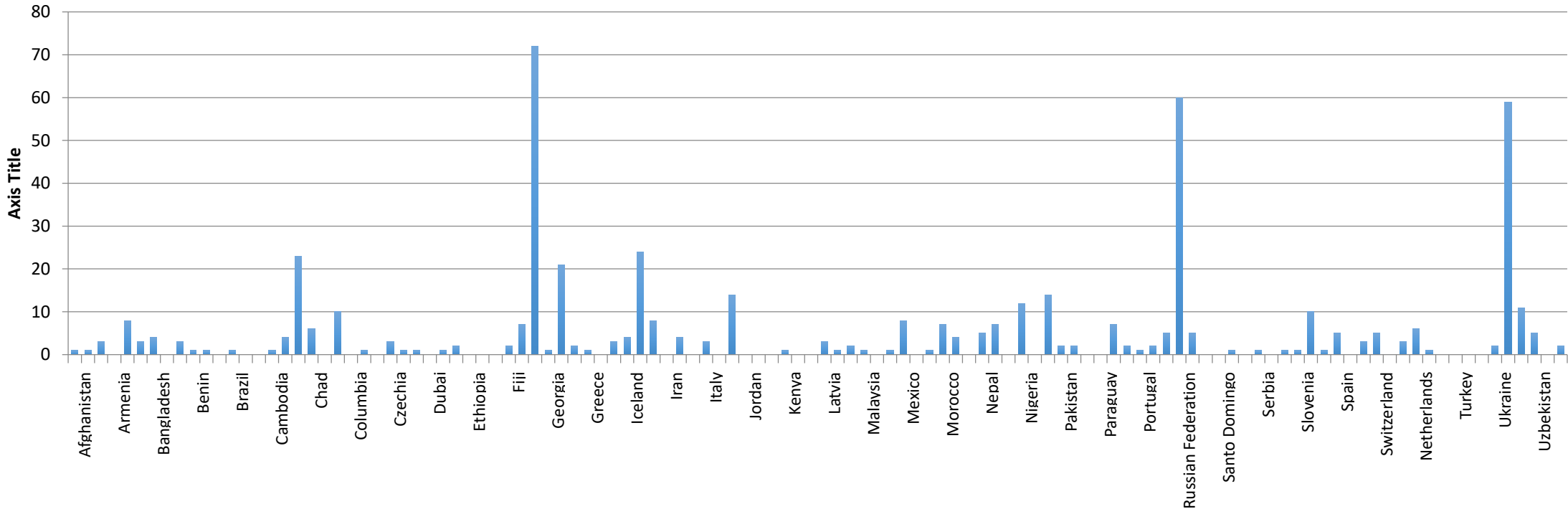


An Exhibition Hall Segur during all the breaks (coffee, lunch)



Demo possibilities
(ask the ELRA team on the booth),
For assistance

Participation: LTs, LP, Language activists, etc.



- Over 500 registered participants from over 75 Countries
- France, Russia, USA with almost 60 each

Some examples

France	72
Russian Federation	60
United States of America	59
India	24
Canada	23
Germany	21
Japan	14
Norway	14
Nigeria	12
United Kingdom	11
China	10
South Africa	10

Afghanistan	1
Algeria	1
Benin	1
Bhutan	1
Brazil	1
Cambodia	1
Croatia	1
Denmark	1
Djibouti	1
Egypt	1
Georgia	1
Greece	1
Kenya	1
Lebanon	1
Malaysia	1
Malta	1
Mongolia	1
Portugal	1
Saudi Arabia	1
Serbia	1
Slovakia	1
Slovenia	1
Republic of Korea	1
Timor-Leste	1

Last but not least ...

- Interpretation ... Automatic Speech to Text
- we are very grateful to our professional interpreters but today we only have Eng/Fr/Russian so we will see what technology can help us achieve in near future;
- Grateful to Karlsruhe Institute of Technology & Karlsruhe Information Technology Solutions - kites GmbH

We wish you all a very fruitful conference
Will come back on Friday to thank the people who
are making this happen



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