

LREC 2022 Workshop Language Resources and Evaluation Conference 20-25 June 2022

The 1st Annual Meeting of the ELRA/ISCA Special Interest Group on Under-Resourced Languages (SIGUL2022)

PROCEEDINGS

Editors: Maite Melero Sakriani Sakti Claudia Soria



Proceedings of the LREC 2022 Workshop of the 1st Annual Meeting of the ELRA/ISCA Special Interest Group on Under-Resourced Languages (SIGUL 2022)

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Message from the Workshop Chairs

Over the last years, research in text and speech processing for less-resourced languages has taken momentum. Initiatives and events have flourished, as well as hackathons, toolkits, special interest groups, and journals' special issues. The topic of less-resourced languages has ceased to be niche and has gained space in major conferences such as LREC, ACL, and Interspeech.

The multiplication of research interest makes it even more necessary for the community that revolves around less-resourced languages to find opportunities for aggregation and discussion. It is also very important that these occasions leave space for communities and representatives of under-resourced and endangered languages, in order to ensure that the research and development of technological solutions are in line with the needs and demands of those communities, with a view to open and inclusive research with strong social impact.

The 1st Annual Meeting of the ELRA/ISCA Special Interest Group on Under-Resourced Languages (SIGUL 2022) spans the research interest areas of less-resourced, under-resourced, endangered, minority and minoritized languages. SIGUL 2022 carries on the tradition of the CCURL-SLTU (Collaboration and Computing for Under-Resourced Languages – Spoken Language Technologies for Under-resourced languages) Workshop Series, which has been organized since 2008 and, as LREC Workshops, since 2014. As usual, SIGUL provides a forum for the presentation of cutting edge research in text and speech processing for under-resourced languages to both academic and industry researchers. In addition, it offers a venue where researchers in different disciplines and from varied backgrounds can fruitfully explore new areas of intellectual and practical development while honouring their common interest in sustaining less-resourced languages.

In order to promote synergies and to increase cross-fertilization between neighbouring disciplines, this year's workshop holds a joint session together with the 18th Workshop on Multiword Expressions (MWE 2022) and hosts a shared task on unsupervised Machine Translation techniques for the benefit of underresourced languages, organized by the MT4All project (CEF 2019-EU-IA-0031).

This year, we have the pleasure to welcome 19 oral and 8 poster presentations, addressing a vast array of topics in NLP, Speech, Data and General issues. Accepted papers display a huge variety of languages, covering 76 different languages from Europe, Asia, Africa and the Americas. This workshop, together with at least five other LREC2022 workshops in neighbouring topics and the main conference track on less-resourced and endangered languages, clearly show how the topic of language resources and speech and natural language processing for less-resourced language is now a mature and well-established field.

The SIGUL 2022 workshop is organised and sponsored by the SIGUL organization, which serves as the Special Interest Group in under-resourced languages for both ELRA and ISCA associations. It is also endorsed by SIGEL, the ACL special interest group on endangered languages. In addition, this year's event has received a sponsorship grant from Google Inc.

Organizers

Maite Melero – Barcelona Supercomputing Center, Spain Sakriani Sakti – JAIST, Japan Claudia Soria – CNR-ILC, Italy

Program Committee:

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Marcely Zanon Boito (LIA – Avignon University, France)

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Workshop Program

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- 14:10–15:10 Session 1: Speech
- 14:10–14:25 Unsupervised Word Segmentation from Discrete Speech Units in Low-Resource Settings Marcely Zanon Boito, Bolaji Yusuf, Lucas Ondel, Aline Villavicencio and Laurent Besacier
- 14:25–14:40 An Open Source Web Reader for Under-Resourced Languages Judy Fong, Þorsteinn Daði Gunnarsson, Sunneva Þorsteinsdóttir, Gunnar Thor Örnólfsson and Jon Gudnason
- 14:40–14:55 Text-to-Speech for Under-Resourced Languages: Phoneme Mapping and Source Language Selection in Transfer Learning Phat Do, Matt Coler, Jelske Dijkstra and Esther Klabbers
- 14:55–15:10 ReadAlong Studio: Practical Zero-Shot Text-Speech Alignment for Indigenous Language Audiobooks
 Patrick Littell, Eric Joanis, Aidan Pine, Marc Tessier, David Huggins Daines and Delasie Torkornoo
- **15:10–16:00** Keynote Speech Sovereignty for Under-resourced Languages Keoni Mahelona
- 16:00–16:30 Coffee break
- 16:30-17:45 Session 2: Data
- 16:30–16:45 Corpus Creation for Sentiment Analysis in Code-Mixed Tulu Text Asha Hegde, Mudoor Devadas Anusha, Sharal Coelho, Hosahalli Lakshmaiah Shashirekha and Bharathi Raja Chakravarthi
- 16:45–17:00 *Crowd-sourcing for Less-resourced Languages: Lingua Libre for Polish* Mathilde Hutin and Marc Allassonnière-Tang
- 17:00–17:15 *Tupían Language Ressources: Data, Tools, Analyses* Lorena Martín Rodríguez, Tatiana Merzhevich, Wellington Silva, Tiago Tresoldi, Carolina Aragon and Fabrício F. Gerardi

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17:15–17:30 Quality versus Quantity: Building Catalan-English MT Resources Ona de Gibert Bonet, Ksenia Kharitonova, Blanca Calvo Figueras, Jordi Armengol-Estapé and Maite Melero
17:30–17:45 A Sentiment Corpus for South African Under-Resourced Languages in a Multilingual Context

Ronny Mabokela and Tim Schlippe

Saturday, June 25, 2022

9:00–10:00 Session 3: MT4All

- 9:00–9:15General overview of unsupervised MT for under resourced languagesÂJordi Armengol
- 9:15–9:30 *Technical approach in MT4All* Iakes Goenaga
- 9:30–9:45 *MT4All generated resources and Shared Task scope and results* Ona de Gibert
- 9:45–10:00 *CUNI Submission to MT4All Shared Task* Ivana Kvapilíková and Ondrej Bojar
- 10:00–10:30 Session 4: General Issues
- 10:00–10:15 *Resource: Indicators on the Presence of Languages in Internet* Daniel Pimienta
- 10:15–10:30 Language Technologies for Low Resource Languages: Sociolinguistic and Multilingual Insights
 A. Seza Doğruöz and Sunayana Sitaram
- 10:30–11:00 Coffee break
- 11:00–12:45 Session 5: NLP
- 11:00–11:15 *Sentiment Analysis for Hausa: Classifying Students' Comments* Ochilbek Rakhmanov and Tim Schlippe
- 11:15–11:30 Nepali Encoder Transformers: An Analysis of Auto Encoding Transformer Language Models for Nepali Text Classification Utsav Maskey, Manish Bhatta, Shiva Bhatt, Sanket Dhungel and Bal Krishna Bal
- 11:30–11:45 CoSwID, a Code Switching Identification Method Suitable for Under-Resourced Languages Laurent Kevers

Saturday, June 25, 2022 (continued)

- 11:45–12:00 A Neural Network Approach to Create Minangkabau-Indonesia Bilingual Dictionary Kartika Resiandi, Yohei Murakami and Arbi Haza Nasution
- 12:00–12:15 *Machine Translation from Standard German to Alemannic Dialects* Louisa Lambrecht, Felix Schneider and Alexander Waibel
- 12:15–12:30 *Question Answering Classification for Amharic Social Media Community Based Questions* Tadesse Destaw, Seid Muhie Yimam, Abinew Ayele and Chris Biemann
- 12:30–12:45 Automatic Detection of Morphological Processes in the Yorùbá Language Tunde Adegbola

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Baseline English and Maltese-English Classification Models for Subjectivity Detection, Sentiment Analysis, Emotion Analysis, Sarcasm Detection, and Irony Detection Keith Cortis and Brian Davis

Building Open-source Speech Technology for Low-resource Minority Languages with SáMi as an Example – Tools, Methods and Experiments Katri Hiovain-Asikainen and Sjur Moshagen

Investigating the Quality of Static Anchor Embeddings from Transformers for Under-Resourced Languages Pranaydeep Singh, Orphee De Clercq and Els Lefever

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- 16:00–16:30 Coffee break
- 16:30–17:30 Panel discussion
- 17:30–17:50 General discussion
- 17:50-18:00 Closing