# **BUCC 2021**

# Proceedings of the 14th Workshop on Building and Using Comparable Corpora (BUCC 2021)

in conjunction with

International Conference on Recent Advances in Natural Language Processing (RANLP 2021)

Edited by

Reinhard Rapp, Serge Sharoff, Pierre Zweigenbaum

September 6, 2021

14th Workshop on Building and Using Comparable Corpora (BUCC 2021) in conjuction with the International Conference Recent Advances in Natural Language Processing (RANLP 2021)

#### PROCEEDINGS

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### 14th BUCC Workshop at RANLP 2021 – Preface

Comparable corpora are collections of documents that are comparable in content and form in various degrees and dimensions. This definition includes many types of parallel and non-parallel multilingual corpora, but also sets of monolingual corpora that are used for comparative purposes. Research on comparable corpora is active but used to be scattered among many workshops and conferences. The workshop series on "Building and Using Comparable Corpora" (BUCC) aims at promoting progress in this exciting field by bundling some of its research, thereby making it more visible and giving it a better platform.

The first 12 editions of the workshop took place in Africa (LREC'08 in Marrakech), America (ACL'11 in Portland and ACL'17 in Vancouver), Asia (ACL-IJCNLP'09 in Singapore, ACL-IJCNLP'15 in Beijing, LREC'18 in Miyazaki, Japan), Europe (LREC'10 in Malta, ACL'13 in Sofia, LREC'14 in Reykjavik, LREC'16 in Portoroz, RANLP'19 in Varna) and also on the border between Asia and Europe (LREC'12 in Istanbul). Due to the corona crisis, the 13th edition took place online as an LREC'20 workshop. This year's 14th edition was held again online and took place as an RANLP'21 workshop.

We would like to thank all people who in one way or another helped in making this workshop once again a success. We are especially grateful to Ruslan Mitkov, Galia Angelova, Ivelina Nikolova, Kiril Simov and the whole RANLP team for their excellent support.

Our special thanks go to Pushpak Bhattacharyya, Tomas Mikolov and Sujith Ravi for accepting to give invited presentations and to the members of the programme committee who did an excellent job in reviewing the submitted papers under strict time constraints. Last but not least we would like to thank our authors, presenters and all participants of the workshop.

Reinhard Rapp, Serge Sharoff, Pierre Zweigenbaum

September 2021

#### Workshop Organizers:

Reinhard Rapp, Athena R.C., Magdeburg-Stendal University of Applied Sciences, University of Mainz (Chair) Serge Sharoff, University of Leeds Pierre Zweigenbaum, Université Paris-Saclay, CNRS, LISN

#### **Programme Committee:**

Ahmet Aker (University of Sheffield, UK) Ebrahim Ansari (Institute for Advanced Studies in Basic Sciences, Iran) Thierry Etchegoyhen (VicomTech, Spain) Hitoshi Isahara (Otemon Gakuin University, Japan) Kyo Kageura (The University of Tokyo, Japan) Natalie Kübler (CLILLAC-ARP, Université de Paris, France Philippe Langlais (Université de Montréal, Canada Yves Lepage (Waseda University, Japan) Emmanuel Morin (Université de Nantes, France) Dragos Stefan Munteanu (Language Weaver, Inc., USA) Reinhard Rapp (Athena R.C., Magdeburg-Stendal University of Applied Sciences, University of Mainz) Nasredine Semmar (CEA LIST, Paris, France) Serge Sharoff (University of Leeds, UK) Richard Sproat (OGI School of Science & Technology, USA) Tim Van de Cruys (KU Leuven, Belgium) Pierre Zweigenbaum (Université Paris-Saclay, CNRS, LISN, Orsay, France)

#### **Invited Speakers:**

Pushpak Bhattacharyya, Indian Institute of Technology Bombai Tomas Mikolov, Czech Institute of Informatics, Robotics and Cybernetics Sujith Ravi, SliceX AI

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## **BUCC 2021 Workshop Programme**

Monday, September 6, 2021

Times refer to UTC + 0

08:00-8:05	Opening
	Session 1: Invited Presentation
08:05-9:00	<i>Machine Translation in Low Resource Setting</i> Pushpak Bhattacharyya, IIT Bombay
	Session 2: Corpus Construction
9:00–9:25	<i>EM Corpus: a comparable corpus for a less-resourced language pair Manipuri- English</i> Rudali Huidrom, Yves Lepage and Khogendra Khomdram
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9:25–9:40	Coffee Break
	Session 3: Data Extraction and Corpus Annotation
9:40–10:05	Mining Bilingual Word Pairs from Comparable Corpus using Apache Spark Frame- work Sanjanasri JP, Vijay Krishna Menon, Soman KP and Krzysztof Wolk
10:05-10:30	<i>Employing Wikipedia as a resource for Named Entity Recognition in Morphologi- cally complex under-resourced languages</i> Aravind Krishnan, Stefan Ziehe, Franziska Pannach and Caroline Sporleder
10:30–10:55	Semi-Automated Labeling of Requirement Datasets for Relation Extraction Jeremias Bohn, Jannik Fischbach, Martin Schmitt, Hinrich Schütze and Andreas Vogelsang
10:55–11:20	A Dutch Dataset for Cross-lingual Multilabel Toxicity Detection Ben Burtenshaw and Mike Kestemont
11:20-12:10	Lunch Break
	Session 4: Invited Presentation
12:10-13:05	Language Modeling and AI Tomas Mikolov, Czech Institute of Informatics, Robotics and Cybernetics

#### **Session 5: Neural MT and Bitext Extraction**

- 13:05–13:30 Syntax-aware Transformers for Neural Machine Translation: The Case of Text to Sign Gloss Translation Santiago Egea Gómez, Euan McGill and Horacio Saggion
- 13:30–13:55 Effective Bitext Extraction From Comparable Corpora Using a Combination of Three Different Approaches Steinbór Steingrímsson, Pintu Lohar, Hrafn Loftsson and Andy Way
- 13:55–14:10 Coffee Break

#### Session 6: Bitext Retrieval and Dictionary Extraction

- 14:10–14:35 *Majority Voting with Bidirectional Pre-translation For Bitext Retrieval* Alexander Jones and Derry Tanti Wijaya
- 14:35–15:00 On Pronunciations in Wiktionary: Extraction and Experiments on Multilingual Syllabification and Stress Prediction Winston Wu and David Yarowsky

#### **Session 7: Invited Presentation**

- 15:00–15:55 *Large-scale Deep Learning for Low-Resource AI* Sujith Ravi, SliceX AI
- 15:55–16:00 Closing