19th SIGMORPHON Workshop on Computational Research in Phonetics Phonology, and Morphology (SIGMORPHON 2022)

Online
14 July 2022

ISBN: 978-1-7138-5638-2

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571

Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2022) by the Association for Computational Linguistics
All rights reserved.

Printed with permission by Curran Associates, Inc. (2022)

For permission requests, please contact the Association for Computational Linguistics
at the address below.

Association for Computational Linguistics
209 N. Eighth Street
Stroudsburg, Pennsylvania 18360

Phone: 1-570-476-8006
Fax: 1-570-476-0860

acl@aclweb.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

Table of Contents

On Building Spoken Language Understanding Systems for Low Resourced Languages
Akshat Gupta 1

Unsupervised morphological segmentation in a language with reduplication
Simon Todd, Annie Huang, Jeremy Needle, Jennifer Hay and Jeanette King 12

Investigating phonological theories with crowd-sourced data: The Inventory Size Hypothesis in the light of Lingua Libre
Mathilde Hutin and Marc Allassonnière-Tang 23

Logical Transductions for the Typology of Ditransitive Prosody
Mai Ha Vu, Aniello De Santo and Hossep Dolatian 29

A Masked Segmental Language Model for Unsupervised Natural Language Segmentation
C.M. Downey, Fei Xia, Gina-Anne Levow and Shane Steinert-Threlkeld 39

Trees probe deeper than strings: an argument from allomorphy
Hossep Dolatian, Shiori Ikawa and Thomas Graf 51

Subword-based Cross-lingual Transfer of Embeddings from Hindi to Marathi and Nepali
Niyata Bafna and Zdeněk Žabokrtský 61

Multidimensional acoustic variation in vowels across English dialects
James Tanner, Morgan Sonderegger and Jane Stuart-Smith 72

Domain-Informed Probing of wav2vec 2.0 Embeddings for Phonetic Features
Patrick Cormac English, John D. Kelleher and Julie Carson-Berndsen 83

Morphotactic Modeling in an Open-source Multi-dialectal Arabic Morphological Analyzer and Generator
Nizar Habash, Reham Marzouk, Christian Khairallah and Salam Khalifa 92

The SIGMORPHON 2022 Shared Task on Morpheme Segmentation
Khuyagbaatar Batsuren, Gábor Bella, Aryaman Arora, Viktor Martinovic, Kyle Gorman, Zdeněk Žabokrtský, Amarsanaa Ganbold, Šárka Dohnalová, Magda Ševčíková, Kateřina Pelegrinová, Fausto Giunchiglia, Ryan Cotterell and Ekaterina Vylomova 103

Sharing Data by Language Family: Data Augmentation for Romance Language Morpheme Segmentation
Lauren Levine 117

SIGMORPHON 2022 Shared Task on Morpheme Segmentation Submission Description: Sequence Labelling for Word-Level Morpheme Segmentation
Leander Girrbach 124

Beyond Characters: Subword-level Morpheme Segmentation
Ben Peters and Andre F. T. Martins 131

Word-level Morpheme segmentation using Transformer neural network
Tsolmon Zundi and Chinbat Avaajargal 139

Morfessor-enriched features and multilingual training for canonical morphological segmentation
Aku Rouhe, Stig-Arne Grönroos, Sami Virpioja, Mathias Creutz and Mikko Kurimo 144

JB132 submission to the SIGMORPHON 2022 Shared Task 3 on Morphological Segmentation
Jan Bodnár 152

SIGMORPHON–UniMorph 2022 Shared Task 0: Modeling Inflection in Language Acquisition
Jordan Kodner and Salam Khalifa 157

SIGMORPHON–UniMorph 2022 Shared Task 0: Generalization and Typologically Diverse Morphological Inflection
Jordan Kodner, Salam Khalifa, Khuyagbaatar Batsuren, Hossep Dolatian, Ryan Cotterell, Faruk Akkus, Antonios Anastasopoulos, Taras Andrushko, Aryaman Arora, Nona Atanalov, Gábor Bella, Elena Budianskaya, Yustinus Ghanggo Ate, Omer Goldman, David Guriel, Simon Guriel, Silvia Guriel-Agiashvili, Witold Kieraś, Andrew Krizhanovsky, Natalia Krizhanovsky, Igor Marchenko, Magdalena Markowska, Polina Mashkovtseva, Maria Nepomniashchaya, Daria Rodionova, Karina Scheifer, Alexandra Sorova, Anastasia Yemelina, Jeremiah Young and Ekaterina Vylomova 176

SIGMORPHON 2022 Task 0 Submission Description: Modelling Morphological Inflection with Data-Driven and Rule-Based Approaches
Tatiana Merzhevich, Nkonye Gbadegoye, Leander Girrbach, Jingwen Li and Ryan Soh-Eun Shim 204

CLUZH at SIGMORPHON 2022 Shared Tasks on Morpheme Segmentation and Inflection Generation
Silvan Wehrli, Simon Clematide and Peter Makarov 212

OSU at SigMorphon 2022: Analogical Inflection With Rule Features
Micha Elsner and Sara Court 220

Generalizing Morphological Inflection Systems to Unseen Lemmas
Changbing Yang, Ruixin (Ray) Yang, Garrett Nicolai and Miikka Silfverberg 226

HeiMorph at SIGMORPHON 2022 Shared Task on Morphological Acquisition Trajectories
Akhilesh Kakolu Ramarao, Yulia Zinova, Kevin Tang and Ruben van de Vijver 236

Morphology is not just a naive Bayes – UniMelb Submission to SIGMORPHON 2022 ST on Morphological Inflection
Andreas Sherbakov and Ekaterina Vylomova 240