



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

**4th Celtic Language Technology Workshop
(CLTW 4)**



PROCEEDINGS

Editors:
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Preface

These proceedings include the programme and papers presented at the 4th Celtic Language Technology Workshop (CLTW 4), co-located with the Language Resources and Evaluation Conference (LREC) in Marseille, June 2022.

In Classical times, Celtic languages were found across a wide swathe of modern Eurasia. Today, they are spoken in regions of the UK, France and Ireland, as well as in emigrant communities in Argentina and Canada. The modern languages are: Breton, Cornish, Irish, Manx, Scottish Gaelic and Welsh. Although the hereditary communities of these languages are small compared to those of most other European languages, they continue to have a vibrant presence in their traditional areas as well as in urban centres. While Irish is the only Celtic language that has official EU language status (since 2007), Welsh, Gaelic and Manx have co-official status. Breton and Cornish also have some limited status in their home regions. That said, all Celtic languages face the same issue in lacking natural language processing (NLP) resources to ensure continued technology support in the digital era.

Until recently, the Celtic languages lagged behind in the areas of NLP and applied language technology. Consequently, research and resource provision for this language group was poor. In recent years, however, some Celtic languages have been able to benefit from improved provisions for under-resourced languages in academia and the tech industry. Some now also have dedicated research teams working on language and speech processing technologies and related resources. The CLTW community and workshop, inaugurated at COLING (Dublin) in 2014, provides a forum to help connect these researchers and their associates to one another, to disseminate cutting-edge work and to raise the profile of Celtic language technology, more generally.

The accepted papers cover an extremely wide range of topics, including: computer-assisted language learning (CLL); automatic speech recognition (ASR), handwriting recognition; speech synthesis; syntactic parsing; part-of-speech tagging; NLP with mediaeval languages and coreference resolution.

We thank our invited speaker, Prof Kevin Scannell of Saint Louis University. We also thank our authors and presenters for their hard work, and workshop attendees for their participation. We are also very grateful to our programme committee for reviewing and providing invaluable feedback on the work published.

The CLTW 4 Workshop Organisers

Dr Theodorus Fransen, National University of Ireland, Galway

Prof William Lamb, The University of Edinburgh

Prof Delyth Prys, Bangor University

Organisers

Theodorus Fransen, National University of Ireland, Galway
William Lamb, The University of Edinburgh
Delyth Prys, Bangor University

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David Willis, University of Oxford

Additional Reviewers

Adrian Doyle, National University of Ireland, Galway

Invited Speaker

Kevin Scannell, Saint Louis University

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Conference Programme

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09:10–09:50 *Keynote*
Prof Kevin Scannell, Saint Louis University

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09:50–10:15 *Multilingual Abstract Meaning Representation for Celtic Languages*
Johannes Heinecke and Anastasia Shimorina

10:15–11:00 Coffee Break / Poster Session

10:15–11:00 *Diachronic Parsing of Pre-Standard Irish*
Kevin Scannell

10:15–11:00 *Creation of an Evaluation Corpus and Baseline Evaluation Scores for Welsh Text Summarisation*
Mahmoud El-Haj, Ignatius Ezeani, Jonathan Morris and Dawn Knight

10:15–11:00 *CLILSTORE.EU - A Multilingual online CLIL platform*
Caoimhín Ó Dónaill

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Gruffudd Prys and Gareth Watkins

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Dewi Jones

Monday, June 20, 2022 (continued)

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William Lamb, Beatrice Alex and Mark Sinclair
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Neasa Ní Chiaráin, Madeleine Comtois, Oisín Nolan, Neimhin Robinson-Gunning,
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- 10:15–11:00 *Introducing the National Corpus of Irish Project*
Mícheál Ó Meachair, Úna Bhreathnach and Gearóid Ó Cleircín
- 11:05–11:55 Oral Session 2**
- 11:05–11:30 *BU-TTS: An Open-Source, Bilingual Welsh-English, Text-to-Speech Corpus*
Stephen Russell, Dewi Jones and Delyth Prys
- 11:30–11:55 *Developing Automatic Speech Recognition for Scottish Gaelic*
Lucy Evans, William Lamb, Mark Sinclair and Beatrice Alex

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11:55–13:00 Oral Session 3

11:55–12:20 *Handwritten Text Recognition (HTR) for Irish-Language Folklore*
Brian Ó Raghallaigh, Andrea Palandri and Críostóir Mac Cárthaigh

12:20–12:45 *AAC don Ghaeilge: the Prototype Development of Speech-Generating Assistive Technology for Irish*
Emily Barnes, Oisín Morrin, Ailbhe Ní Chasaide, Julia Cummins, Harald Berthelsen, Andy Murphy, Muireann Nic Corcráin, Claire O’Neill, Christer Gobl and Neasa Ní Chiaráin

12:45–13:00 *Valedictory Session*
CLTW organisers

