

Preface

Intelligent Computer-Assisted Language Learning (ICALL), i.e., the integration of Natural Language Processing (NLP) and Speech Technologies (ST) in language learning applications, is a rapidly developing area which has started to attract increased attention from the Language Technology (LT) – generally understood as encompassing both NLP and ST – community. ICALL research has generated a number of successful applications for alleviating a variety of (mechanical) tasks that teachers face daily in their work, for example grammar or spelling error marking, essay grading, preparation of text questions for reading activities, creating tests and exercises, etc.

However, reusing LT methods or tools (developed for other than pedagogical purposes) in pedagogical applications is not always straightforward since they need to be adapted to the educational tasks, e.g. readability measures for legal texts adapted to the second language learning context. Thus, LT researchers who intend to re-use their algorithms and techniques in CALL applications need new datasets, specifically designed corpora, databases, etc. to fine-tune their tools for new target groups, the design and compilation of which are both critical for achieving good results and time-consuming.

There are other challenges that the area of LT-based CALL faces: re-use and sharing of existing LT components, copyright issues, standardization of pedagogical framework, lack of collaboration with end-users, to name just a few. Probably the most significant challenge is to make sure that the research results reach the actual end-users in the form of tools which can become a part of the educational process, and which are both easy to use and have a pedagogically sound basis. The goal of the workshop was to bring together (computational) linguists involved in research aiming at integrating LT in CALL systems and exploring the theoretical and methodological issues arising in this connection, with the purpose of sharing experiences, achievements and setbacks, and to discuss potential ways of addressing the challenges that need to be overcome.

This year we invited submissions of papers and software demonstrations that would

- describe research directly aimed at ICALL
- demonstrate actual or discuss potential use of existing LT tools or resources for language learning
- describe ongoing development of resources and tools with potential usage in ICALL, either directly in interactive applications, or indirectly in materials, application or curriculum development, e.g. collecting and annotating learner corpora; developing tools and algorithms for readability analysis, selecting optimal corpus examples, etc.
- discuss challenges and/or research agendas for ICALL

with a special focus on Nordic languages. Out of 13 submissions, 10 papers have been accepted following the recommendations of two anonymous reviews per paper provided by the members of our Program Committee:

- Lars Ahrenberg, Linköping University, Sweden
- Lars Borin, University of Gothenburg, Sweden
- Antonio Branco, University of Lisboa, Portugal
- Simon Dobnik, University of Gothenburg, Sweden
- Robert Eklund, Linköping University, Sweden
- Katarina Heimann Mühlenbock, DART, Sahlgrenska Universitetssjukhuset, Göteborg, Sweden

- Thomas François, UCLouvain, Belgium
- Arne Jönsson, Linköping University, Sweden
- Sofie Johansson Kokkinakis, University of Gothenburg, Sweden
- Chris Koniaris, University of Gothenburg, Sweden
- Peter Ljunglöf, University of Gothenburg, Sweden
- Hrafn Loftsson, Reykjavik University, Iceland
- Montse Maritxalar, University of the Basque country, Spain
- Detmar Meurers, University of Tübingen, Germany
- Martí Quixal, University of Tübingen, Germany
- Mathias Schulze, University of Waterloo, Canada
- Joel Tetreault, Yahoo! Labs, US
- Trond Trosterud, Universitetet i Tromsø, Norway
- Cornelia Tschichold, Swansea University, UK
- Francis Tyers, The Arctic University of Norway, Norway
- Elena Volodina, University of Gothenburg, Sweden

The geography of accepted papers (i.e. author affiliations) covered Belgium, Canada, Germany, Norway, Russia, Spain, Sweden and USA. The resources and tools described in the papers in this volume are aimed at a range of languages: Swedish, Russian, Estonian, French, German, Spanish and English. The papers cover three main topic areas: *resources for development of ICALL applications* (learner corpora vs coursebook corpora), *tools and algorithms for the analysis of learner language* (focusing on collocations, reading tasks, cloze items, pronunciation, spelling, level classification of learner production), and *generation of learning materials* (e.g., exercise generators).

The workshop started off with short presentations of each paper, followed by discussions during the two poster sessions. The workshop concluded with an invited talk by Detmar Meurers on *A roadmap connecting NLP research and language learning* which developed into a free discussion on challenges and future prospects of ICALL.

The workshop organizers:

Elena Volodina

Lars Borin

Ildikó Pilán

WS website: <http://spraakbanken.gu.se/eng/Research/ICALL/3rdNLP4CALL>

Acknowledgements: Financial support for the organization of the workshop has come from the University of Gothenburg through its support of the *Centre for Language Technology*: <http://www.clt.gu.se>