Preface

It is our great pleasure to welcome you to CLiC-it 2019 (clic2019.di.uniba.it/), the Sixth Italian Conference on Computational Linguistics, held between November 13th and 15th in Bari, hosted and locally organized by Università degli Studi di Bari Aldo Moro.

The CLiC-it conference series is an initiative of the Italian Association for Computational Linguistics (AILC) which, after six years of activity, has clearly established itself as the premier national forum for research and development in the fields of Computational Linguistics and Natural Language Processing, where leading researchers and practitioners from academia and industry meet to share their research results, experiences, and challenges.

The maturity of the conference is reflected by the quality of the submitted works. We would like to take this opportunity to warmly thank all the authors for submitting their original research. This year CLiC-it received 82 submissions, confirming its increasing trend (from 64 submissions in 2015 to 70 in 2018).

The Program Committee worked very hard to ensure that every paper received at least two careful and fair reviews, with the 69.51% of the papers which received three or even more reviews. This process finally led to the acceptance of 20 papers for oral presentation and 55 papers for poster presentation, with a global acceptance rate of 91.46% motivated by the inclusive spirit of the conference.

That process involved 34 Area Chairs and 209 Program Committee members. They were assisted by 4 additional reviewers. We are extremely grateful to all the PC members and reviewers for producing 238 detailed and insightful reviews.

The conference is also receiving considerable attention from the international community, with 26 (31.71%) submitted papers showing at least one author affiliated to a foreign institution, of which 24 accepted (32%). This amounts to a total of 41 authors over 252 (16.33%) affiliated to 14

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foreign countries: Croatia, Denmark, France, Germany, Ireland, Luxembourg, Malta, Netherlands, Romania, Russia, Spain, Switzerland, Turkey, and United States.

Regardless of the format of presentation, all accepted papers are included in the proceedings equally and are available as open access publication. In line with previous editions, the conference is organised around thematic areas managed by two chairs per area.

In addition to the technical program, this year we have two invited talks and a tutorial on different topics, showing the interdisciplinary spirit of our research community. We are very grateful to both Raquel Fernández (University of Amsterdam) for agreeing to share with the Italian Computational Linguistics community her knowledge on visually grounded dialogue models, and to Andrea Moro (Scuola Universitaria Superiore IUSS Pavia) for sharing his expertise on the architecture of human grammars, as well as to Dirk Hovy for his tutorial on the problem of bias in Natural Language Processing applications.

As in the previous edition of the conference, we organised a special track called "Research Communications", encouraging authors of articles published in 2019 at outstanding international conferences in our field to submit short abstracts of their work. Research communications are not published in the proceedings, but they are orally presented within a dedicated session at the conference, in order to enforce dissemination of excellence in research. We received 10 submissions and could include 6 of them in the program.

Finally, the program includes a panel discussion on Ethical issues in Natural Language Processing chaired by Alessandro Lenci (University of Pisa). The goal of the panel is to foster a discussion on some key ethical topics in NLP research and applications, with a focus on their impact on the Italian community. Themes of the panel include negative stereotypes in data-driven computational models; sustainability of data- and resource-intense NLP; the impact of NLP technology in digital society; privacy and NLP, among other crucial questions.

Traditionally, around one half of the participants at CLiC-it are young postdocs, PhD students, or even undergraduate students. Following the tradition of past years, a prize will be given to the best paper among those whose first author is a student. This year, the best paper will be selected among 14 oral papers and 30 papers presented as posters.

Moreover, during the conference we award the prize for the best Master Thesis (Laurea Magistrale) in Computational Linguistics, defended at an

Italian University between August 1st 2018 and July 31st 2019. This special prize is also endorsed by AILC. We received 6 candidate theses, which have been evaluated by a special jury. The prize will be awarded at the conference by a member of the jury.

Even if CLiC-it is a medium size conference, organizing this annual meeting requires major effort from many people. This conference would not have been possible without the dedication, devotion and hard work of the members of the Local Organising Committee and of the Student Volunteers, who offered their time and energies during the past last year to contribute to the success of the event. We are also extremely grateful to our Program Committee members for producing a lot of detailed and insightful reviews, as well as to the Area Chairs who assisted the Program Chairs in their duties. All these people are named in the following pages.

In addition to the contributions mentioned above, we also gratefully acknowledge the support from endorsing organisations and institutions and from all of our sponsors, who generously provided funds and services that are crucial for the realisation of this event. Special thanks are also due to the University of Bari Aldo Moro for its support in the organisation of the event, as well as to our media partner Start Magazine.

Please join us at CLiC-it 2019 to interact with experts from academia and industry on topics related to Computational Linguistics and Natural Language Processing, and to experience and share new research findings, best practices, state-of-the-art systems and applications. We hope that, as in the past, this year's conference will be intellectually stimulating, and that you will take home many new ideas and methods that will help extend your own research.

Raffaella Bernardi, Roberto Navigli, Giovanni Semeraro
CLiC-it 2019 Conference and Program Chairs

Organizing Committee

Conference and Program Chairs

Raffaella Bernardi, Università degli Studi di Trento

Roberto Navigli, Università degli Studi di Roma La Sapienza

Giovanni Semeraro, Università degli Studi di Bari Aldo Moro

Area Chairs

Dialogue, Discourse and Natural Language Generation

- Alessandro Mazzei, Università degli Studi di Torino
- Marco Guerini, Fondazione Bruno Kessler

Explainability of Deep Learning models for NLP

- Danilo Croce, Università degli Studi di Roma Tor Vergata
- Aurelie Herbelot, Università degli Studi di Trento

Information Extraction, Information Retrieval and Question Answering

- Raffaele Perego, ISTI - CNR
- Stefano Mizzaro, Università degli Studi di Udine

Knowledge Representation

- Enrico Franconi, Libera Università di Bolzano
- Diego Reforgiato, Università degli Studi di Cagliari

Language Resources and Evaluation

- Elisabetta Jezek, Università degli Studi di Pavia
- Cristina Bosco, Università degli Studi di Torino

Lexical and Sentence-level Semantics

- Alessandro Panunzi, Università degli Studi di Firenze

– Rocco Tripodi, Università Ca' Foscari di Venezia

Linguistic Issues in CL and NLP

– Marco Passarotti, Università Cattolica del Sacro Cuore, Milano
– Malvina Nissim, Università di Groningen

Linguistic Theories, Cognitive Modelling and Psycholinguistics

– Marco Marelli, Università degli Studi di Milano-Bicocca
– Francesco Vespignani, Università degli Studi di Trento

Machine Translation and Multilinguality

– Luisa Bentivogli, Fondazione Bruno Kessler
– Johanna Monti, Università degli Studi di Napoli L'Orientale

Morphology and Syntax Processing

– Fabio Tamburini, FICLIT - Alma mater studiorum Università di Bologna
– Cristiano Chesi, Ne.T.S.IUSS Center for Neurolinguistics and Theoretical Syntax, Pavia

NLP for Digital Humanities

– Federico Boschetti, Istituto di Linguistica Computazionale "A. Zampoli" (ILC), CNR di Pisa
– Rachele Sprugnoli, Università Cattolica del Sacro Cuore, Milano

NLP for Web and Social Media

– Serena Villata, CNRS - Laboratoire d'Informatique, Signaux et Systèmes de Sophia-Antipolis
– Viviana Patti, Università degli Studi di Torino

Pragmatics and Creativity

– Federica Cavicchio, Università degli Studi di Padova
– Carlo Strapparava, Fondazione Bruno Kessler

Research and Industrial NLP Applications

- Francesca Bonin, IBM Research AI
- Alessandro Moschitti, Amazon

Replicable and Reproducible methods

- Pierpaolo Basile, Università degli Studi di Bari Aldo Moro
- Giorgio Maria Di Nunzio, Università degli Studi di Padova

Spoken Language Processing and Automatic Speech Understanding

- Francesco Cutugno, Università degli Studi di Napoli Federico II
- Alessandro Vietti, Libera Università di Bolzano

Vision, Robotics, Multimodal and Grounding

- Tatiana Tommasi, Istituto Italiano di Tecnologia, Milano
- Raffaella Folgieri, Università degli Studi di Milano

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