

# Special Issue on Computational Dialogue Modelling: The Role of Pragmatics and Common Ground in Interaction Call for Papers

# **Guest editors**

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Natural Language Processing capabilities for modern machines are becoming more and more important to break human-machine communication barriers and improve the quality of the interaction. Simple commands and dialogue state tracking methods are available for very constrained tasks and domains, but in order to move towards more complex scenarios, deeper insights concerning the role of pragmatics in dialogue systems and of grounding and common ground are needed. For example, investigating the role of pragmatics in dialogue systems allows systems to be more *observable* in the sense that inconsistencies between agents' internal representations and perceived evidence are made clear in an efficient way. Also, more complex clarification strategies allow systems to be more *recoverable* as reported inconsistencies can be addressed efficiently. In general, managing conflicting internal representations of the grounded domain among involved agents, both human and artificial, is of critical importance to improve observability and recoverability in technological systems using interfaces based on natural language. Beyond case-specific applications, this issue aims at collecting different approaches to the definition of general theoretical/technological frameworks involving pragmatics at their core to generate more complex interactions. Topics of interest include but are not limited to:

Theoretical models for argumentation-based dialogue
Disambiguation strategies
Semantics, pragmatics, and context in dialogue systems
Interactional competences: cooperation, clarification, repair, feedback, turn-taking, grounding

Dialogue corpora collection and annotation protocols
Embodied conversational agents
Situated conversational agents
Natural language understanding
Natural language generation
Dialogue-oriented knowledge bases
Multi-party dialogue

Call Deadline: April 30, 2021

Novel and completed researches, literature surveys, position papers, review papers, and project reports about the listed topics are all welcome. Papers devoted to phenomena and specialties related to the Italian language will be of a particular but not exclusive interest. Extended abstracts (one single column page long text + references) are expected before the submission of the final paper to allow the organizers to set up the reviewing process and provide appropriate feedback to the authors in a timely manner. Private companies and innovative startups will be also invited to contribute to the issue with their latest ideas and products in the field.

## **Important dates:**

Extended abstracts submission: March 07, 2021

Paper submission: April 30, 2021 Feedback to authors: May 30, 2021 Revised submission: June 30, 2021

Abstracts should be sent to <a href="mailto:cutugno@unina.it">cutugno@unina.it</a> AND <a href="mailto:hbuschme@uni-bielefeld.de">hbuschme@uni-bielefeld.de</a>



URL: http://www.ai-lc.it/index.php?slab=rivista

www.aAccademia.it/IJCoL 01

The Italian Journal of Computational Linguistics (IJCoL) is published by the Italian Association of Computational Linguistics (AILC - www.ai-lc.it). Together with the annual conference CLIC-it (Italian Conference on Computational Linguistics) and the EVALITA evaluation campaign specifically devoted to Natural Language Processing and Speech tools for Italian, the journal aims at meeting needs for a national and international forum in the promotion and dissemination of high-level original research in the field of Computational Linguistics (CL). The Italian Journal of Computational Linguistics is today an open—access peer—reviewed journal published on-line twice a year.

The journal intends to fill a twofold gap, at the national and international levels. The *Italian Association for Computational Linguistics* brings together the national community of CL researchers operating in both academic and industrial environments, in humanistic and/or computer science departments. In this context, a journal which was the expression of the plurality of voices within the newly founded Italian Association was urgently needed. At the international level, IJCoL aims at increasing the relatively low number of journals focusing on Computational Linguistics.

We would like IJCoL to be an open space for discussion, particularly by young researchers bringing in experiences, theoretical and experimental results in a continuous dialogue, being aware of the complexity of the scientific and technological challenges that CL is called to face today. IJCoL thus intends to cover a broad spectrum of topics related to natural language and computation tackled from different perspectives. A central aim of the journal will be to bridge the gap between the results emerging in the different areas of natural language processing and other disciplines, ranging from theoretical or descriptive linguistics, cognitive psychology, philosophy, philology or neuroscience and computer science.

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