AVVISO DI SEMINARI

Prof. Rodolfo DELMONTE

Università Ca' Foscari Venezia

Mercoledì 13 novembre 2019, ore 9:00 – Sala Consiglio – VII Piano - Dipartimento di Informatica
Venerdì 15 novembre 2019, ore 15:00 - Aula 2 - Palazzo delle Aule

Computational Linguistics and Semantics for NLProcessing and NLUnderstanding

Understanding Natural Language, i.e. understanding words, sentences and paragraphs, summarizing texts, answering questions appropriately are the most yearned for goals at the heart of the AI revolution which aims at creating virtual assistants that can conduct a sensible and fruitful dialogue with its human interlocutor. No such goal can be accomplished with Deep Learning or other Machine Learning approaches due to inherent difficulties in representing the semantics and pragmatics of human language. From polysemy at word level, to syntactic ambiguity at structural level, at coreference level, there is then the need to produce inferences to fill in gaps in semantic structures and cope with complex and hard to understand sentences. We will discuss these themes moving from a general presentation of the work done on Semantics at the LCL - Laboratory of Computational Linguistics - of the Ca Foscari University of Venice. As intermediate steps, careful consideration will be given to what currently available parsers can do on Italian non-canonical syntactic structures frequently found in newspaper articles, but also in children stories. The rest of the first seminar will be devoted to clarifying what is intended for semantics and inferential relations by illustrating a short text and the output of its computation by the system GETARUNS. This output will be compared to the output of available parsers of Italian. The second seminar will be devoted to the use of semantics and linguistically-based approaches in the analysis of social media, focussing on sentiment and opinion analysis, irony and sarcasm analysis. I will focus on typical pitfalls that may be found in short texts like tweets, or short political commentaries in newspapers. This will also be illustrated on the basis of the output of the computation by another system ITALVENSES. Bot systems will be made available to students.

Rodolfo Delmonte has been Associate Professor of Computational Linguistics at Ca Foscari University in Venice since 1987 and is now retired. He has over 200 publications in international journals and conference proceedings, including 8 books. He has been member of scientific committees and chair of international conferences, invited speaker in Europe, Australia and in USA. Expert for national research councils like SSHR in Canada, ANR and AERES in France, Scientific Research Fund (FWO) in Belgium, and the European Commission in Brussel. Teaching courses and seminars in summers schools in Romania and Bulgaria, in Paris, Besançon, San Sebastian, and for a longer period invited professor at the University UTD in Dallas. He has organized 27 prestigious workshops and conferences in Venice. He and his team participated in semantically related international Challenges organized by NIST and ACL in USA, as well as by EVALITA in Italy with his symbolic linguistically based system called Getaruns. Semantics and pragmatics has been his focus of interest in the last text years, including research themes like irony, sarcasm in political commentaries, and literary narratives and poetry lately including Shakespeare's Sonnets. In the last five years he has decided to dedicate himself to poetry and TTS which were his first research interests and has produced SPARSAR a system that reads English poetry preserving meaning and contributing emotions.