ViVoLab - Speech Technologies Group

Reference group T36_17R

CÁTEDRA RTVE DE LA UNIVERSIDAD DE ZARAGOZA

CONFERENCE

Selected Topics in Conversational System Research

Prof. Giuseppe Riccardi

University of Trento, Italy

Date and time: Thursday 25th April 2019, 10 am

Location:

Sala de conferencias, Edificio I+D+i, 1ª planta

c/Mariano Esquillor s/n

Campus Río Ebro, Zaragoza

Contact person: Prof. Eduardo Lleida

Conversational system research has made major advances in the last thirty years. The most relevant breakthroughs have come from automatic speech recognition and shallow parsing of natural language. In next-generation agents, we are aiming at machines that are able to manage emotions in realistic situations. We are planning to train agents that can handle complex tasks and manage cooperative conversations. In this talk, we will cover three research topics we have been focusing in the last few years. We will report on recent research on a) machine perception of affective scenes b) modeling turn-taking and c) open-domain dialogue systems.

Prof. Giuseppe Riccardi is founder and director of the Signals and Interactive Systems Lab at University of Trento, Italy. He received his PhD in Electrical Engineering from the Department of Electrical Engineering at the University of Padua, Italy. From 1993 to 2005, he was at AT&T Bell Laboratories (USA) and then AT&T Labs-Research (USA) where he worked in the Speech and Language Processing Lab. In 2005 joined the faculty of University of Trento (Italy). He is affiliated with the Department of Information Engineering.

Prof. Riccardi's research on stochastic finite state machines for speech and language processing has been applied to a wide range of domains for task automation. He and his colleagues designed the AT&T spoken language system ranked first in the 1994 DARPA ATIS evaluation. He and his colleagues pioneered the speech and language research in spontaneous speech for the well-known "How May I Help You?" research program which led to breakthrough speech services. His research on learning finite state automata and transducers has lead to the creation of the first large scale finite state chain decoding for machine translation (Anuvaad). He lead University of Trento's team that contributed to the IBM WATSON machine that won the Jeopardy! challenge.

Prof. Riccardi has co-authored more than 200 scientific papers. He holds more than 90 patents in the field of automatic speech recognition, understanding, machine translation, natural language processing and machine learning. His current research interests are natural language modeling and understanding, spoken/multimodal dialogue, affective computing, machine learning and social computing. Prof. Riccardi has received many national and international awards including the Marie Curie Excellence Grant (predecessor of the ERC Starting Grant) by the European Commission, IEEE SPS Best Paper Award, IBM Faculty Award and AMAZON Alexa award.