

2015 Ice Bucket Call for Assistive Technology Projects

ALLSpeak - An Automatic Speech Recognition Android App for ALS patients

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PROJECT VALUE	146.905,50 euro
DURATION	24 months
PROJECT OBJECTIVES	<p>ALL Speak is a software designed to help patients with ALS to overcome their communication deficit by providing a simple assistive tool capable to improve quality of life throughout the disease progression. The basic idea of this application is the possibility to exploit the patient's residual vocalization using a software able to recognize any type of sound emitted and to associate it with a particular word or phrase, that will be reproduced with the previously recorded actual voice of the subject. This will provide support to the specific needs and residual potential of ALS patients and will allow communication of the most urgent necessities. Furthermore, the application allows to monitor the evolution in power, speed and intelligibility of patients' speech: the application will be able to notice when certain parameters of phonation drop below a predetermined level in order to directly inform the clinician, through specially created web services.</p> <p>The application, that can be installed on all phones with Android system, will be realized by the Italian Institute of Technology in Genoa, it will be tested by the Fondazione Centro San Raffaele Hospital in Milan and will be issued free of charge to all interested parties.</p>