

Presentation Skills Automatic Real-time Feedback Mechanisms

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Problem Description

Parallelism in teaching classes is visible in many forms. An example of a one to many format is the lecture. Another example is students who work individually on their assignments. However, in teaching there is one specific situation that is still not in a parallel format yet. That situation is created when presentation are mandatory. This results in a time consuming bottleneck in the process of teaching. One of the standard settings is where students in turn give a presentation on their work for their fellow students. This is especially time consuming if the presentations are held by novice speakers. Hopes are then, that the group is able to fulfil a sounding board function and is able to give proper unbiased quantitative and qualitative feedback. But, most of the time the audience consists also of novices.

Project Goals

The goal is to develop a system able to give feedback usable for performance improvement of novice speakers on verbal and nonverbal skills. Through the interpretation of one or all of the following components: pose, gesture, prosody, intonation, pitch and speech rate performance grades should be given related to a predefined rubric and metrics (comparable with text editor generated readability statistics).

Literature

Rebecca Hincks. (2005) "Measures and perceptions of liveliness in student oral presentation speech: A proposal for an automatic feedback mechanism". System Volume 33, Issue 4, pages 575–591.

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Hao-Yu Wu, Michael Rubinstein, Eugene Shih, John Guttag, Frédo Durand, William T. Freeman. (2011) "Eulerian Video Magnification for Revealing Subtle Changes in the World",
<http://people.csail.mit.edu/mrub/vidmag/>

Book: Robert R. H. Anholt. "Dazzle'em with style", The art of oral scientific presentation. Elsevier Academic Press

Presentation skills feedback form generator:

<http://www.ratespeeches.com/g=presentation-skills-feedback-form-generator>

Oral Presentation Rubrics:

http://www.readwritethink.org/files/resources/lesson_images/lesson416/OralRubric.pdf

http://www.fresnostate.edu/academics/oie/documents/oral_pres_rubric.pdf

http://www.betterhighschools.org/MidwestSIG/documents/Szachowicz_handout3.pdf