ABSTRACT:
A character’s face can be manipulated by an animator via complex rig controls that allow to pose and to key frame facial behaviors in the timeline of a 3D tool. Setting the facial rig controls is a key process that riggers execute to ensure animators have a pleasant and precise control of a character’s face. But the process of setting the controls is often laborious, time-consuming, diverse and erratic, because controls need to be effective in terms of the deformation generated in the facial skin and intuitive in terms of the animator interaction. In addition, there is uncertainty amongst digital artists regarding how a facial rig can be built for animation; each rigger has its own approach to build and to provide the control of a facial rig. This poses an interesting question: is it possible to optimize the setup of facial rig controls in order to achieve appealing and accurate key frame facial animation? This paper presents a solution: a complete and user customizable facial rig interface system based on a multimodal approach as a result of previous research demonstrating that this topic is open to improvements. A validation of this system has been carried out with 15 users who are 3D digital artists and the results reveal that this approach can be a relevant contribution for character facial rigging and animation.

FULL PAPER: