IMPROVING MEDIA LITERACY AMONG 10-15 YEAR-OLDS USING IMAGE ANALYSIS

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Abstract

According to German surveys conducted in 2014 almost all (98%) 10 to 15 year-olds have access to smartphones or digital cameras. Motivated by the availability of mobile devices and Internet connectivity, and with the spread of online social network sites (SNS) and cloud services, more and more of the photos they take are published online. The enabling means have become an integral part of the “digital natives” lives. Their natural media use, though, is opposed to a lack of awareness for possibilities and impacts of image processing, online data exploitation, for potential risks and their responsibility in dealing with photos online. In this paper we propose a novel interdisciplinary approach for children and adolescents from age 10+ using image analysis to improve their media literacy, raise awareness for possibilities, risks and consequences and to encourage them in dealing responsibly with pictures online. The overall idea is to confront them with their online “naked” self, which is done by developing and utilizing a software tool – The Profiler. The Profiler retrieves their online available pictures, analyzes them using state of the art image processing algorithms and finally aggregates the information to create person profiles of them. Furthermore, we present first results from this ongoing joint work, such as first findings of a survey conducted with 900 pupils in Vienna, a concept for the image profiling software tool and lessons learned so far.

Keywords: Media Literacy, Image Analysis, Youth Research, Interdisciplinary Research and Education, Social Network Services, Affective Image Processing, Privacy, Image Profiling

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