

## Scent as a Media, Will it Stink?

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**Abstract.** Smell and Taste as media are some of the last challenges of multimedia applications. Across a number of application areas: Gaming, TV, Health, Tourism, Education – olfaction (the sense of smell) can increase the sense of reality, provide an additional communication modality, thus enhance the user Quality of Experience (QoE). In recent years, we have started to see signs of the use of olfactory data across a number of application spaces; tourism, notification alerting, in virtual reality to name a few. With this said, the sense of smell as a media brings a number of challenges, some common with other media, some specific to olfactory. It has been shown that we perceive smell differently based on age, culture, mood, gender and life experiences. Unlike the transitory nature of audio and video, smell moves slowly and lingers in the air. This work focuses on inter-stream synchronization of olfactory data and video. It will define temporal for smell and video specific to particular scenarios. It will produce a set of guidelines that will be used in the design and development of an algorithm to provide synchronized delivery of smell and video across a communications network.