PERSONALIZING WEATHER FORECASTS USING AI TECHNIQUES
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ABSTRACT

- Communicating the scientific data of the weather forecasts to the general public has been always a challenge. Using computer graphics' visual representations to convey the message to mean people has certainly helped a lot to popularize the weather forecast consumption by the general public.

- However, these representations are not information rich since they are abstraction; moreover they are not very actionable on the receiver side to help one decide how s/he will "live" the forecast weather conditions.

- Therefore, there is a need to personalize the forecast based on past user experience and personal needs. The forecast has to become more human- and needs-oriented and more focused to the particular requirements of each individual person.

- We, thus, propose a new co-creation process in which the audience is called to provide a daily feedback on how they lived the weather conditions personally, so that, "my personal forecast" can be produced making the forecast more actionable on the user side. Preliminary such attempts include the "feels like" temperature forecasts.

- To arrive at the "my personal forecast", AI-based recommender systems need to be applied, using fuzzy logic as the appropriate method for the user to express how s/he actually lived personally lived weather conditions every day.

"MY PERSONAL" WEATHER FORECAST

- While recommendation algorithms, such as Collaborative Filtering (CF) make automatic predictions about the interests of customers by collecting information from number of other customers, the "*my personal forecast*" is based on the same user's historical judgement about the perceived fuzzy logic feeling of certain weather conditions on a daily basis, to arrive at a personal weather forecast that is more meaningful about how is about to "live" next day's weather conditions. i.e. forecast.

- In this way, communication of weather forecasts becomes digitally transformed in the sense that personalized experience of the expected weather impacts can be produced using AI / recommendation systems and fuzzy logic.