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Inferring Emotions from Human Voice

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Inferring Emotions from Human Voice

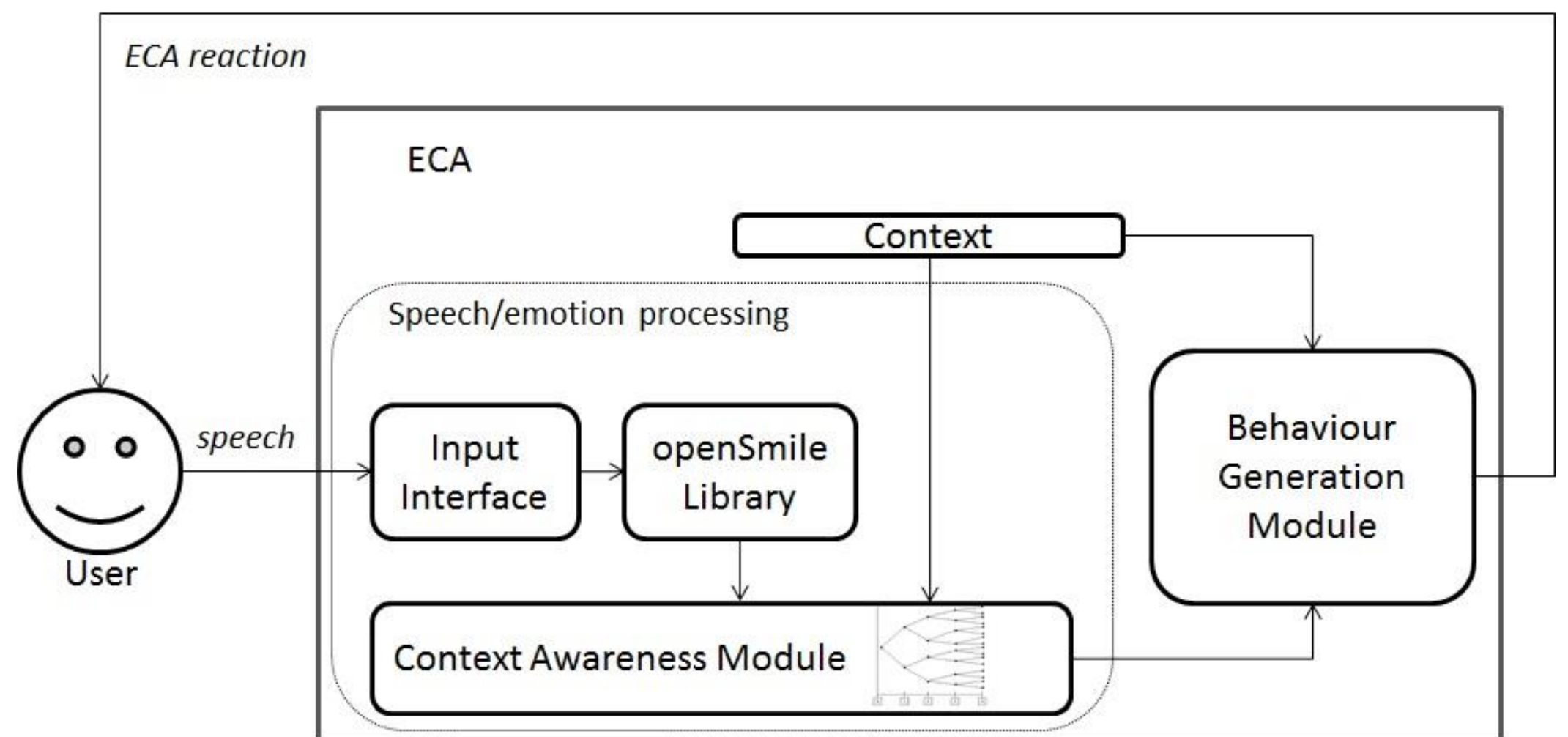
Daniel Formolo | Tibor Bosse | Vrije Universiteit Amsterdam

1-Problem

Although most ECAs respond to *what* the user says, they **often do not respond to *how* the user says it**, hence ignoring the emotional state of users during the conversation.

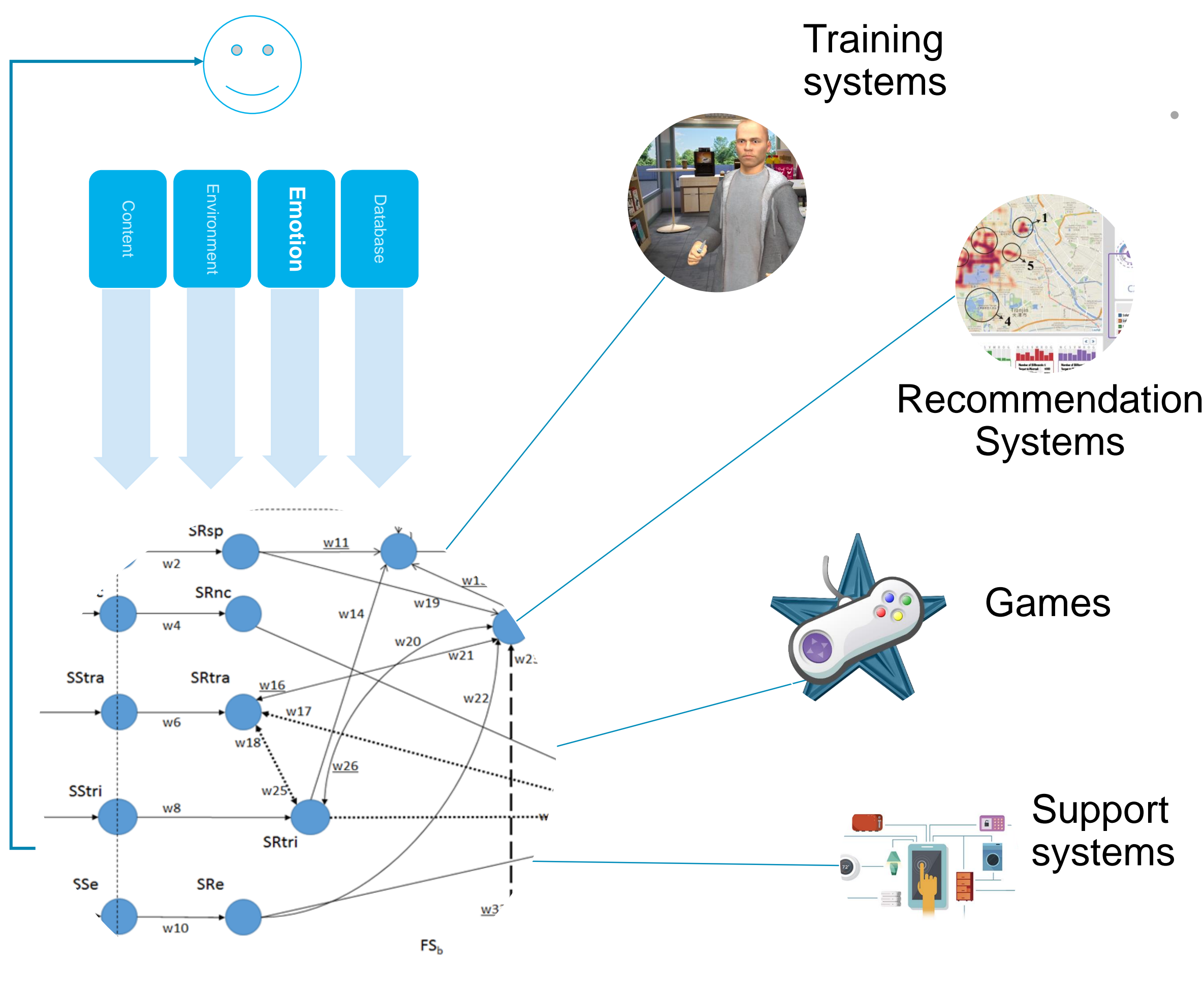
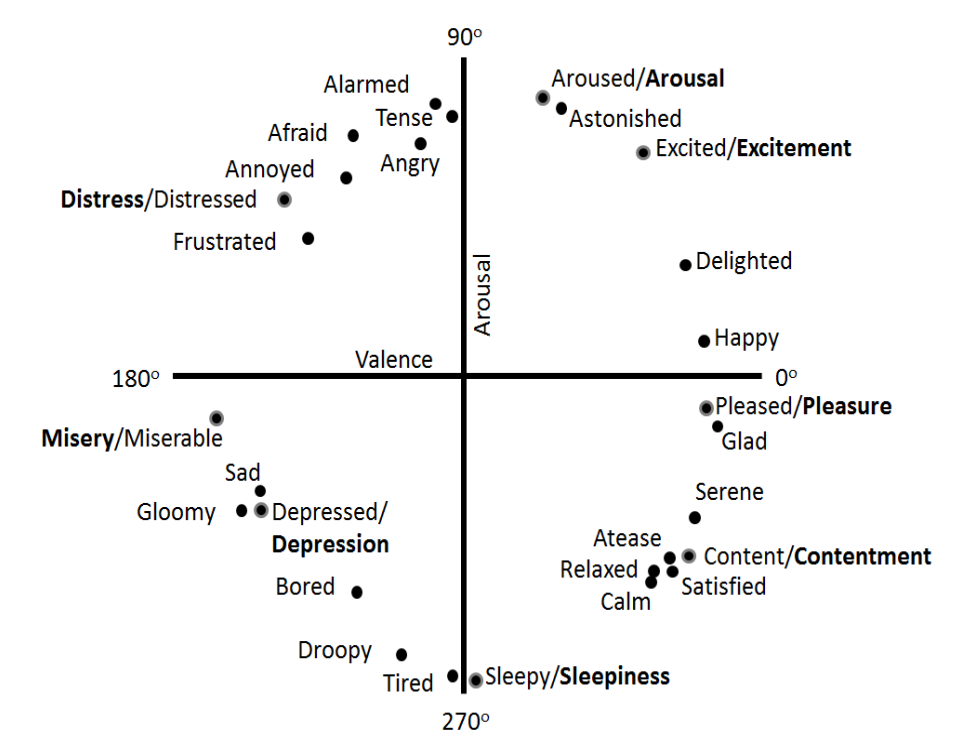
Inferring the current **emotional state** of users **enables** us to build more **realistic ECA** and more **effective applications**.

3-The System



PSYCHOLOGY:

- Categorical Theories
 - joy, sadness, fear, anger, disgust
- Dimensional Theories
 - Arousal, Valence, Dominance



4-Conclusions

- Combining different sources of information increases accuracy.
 - Context
- There are some limitations when working with vocal signals.
- Adding emotions to human-agent interaction enriches user experience.

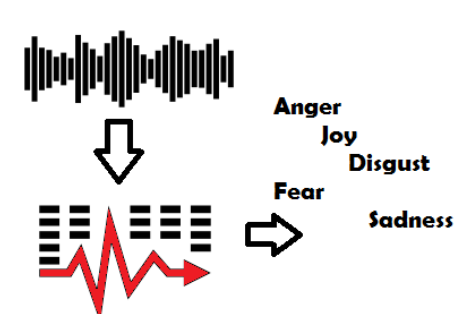
2-The Process

Step 1



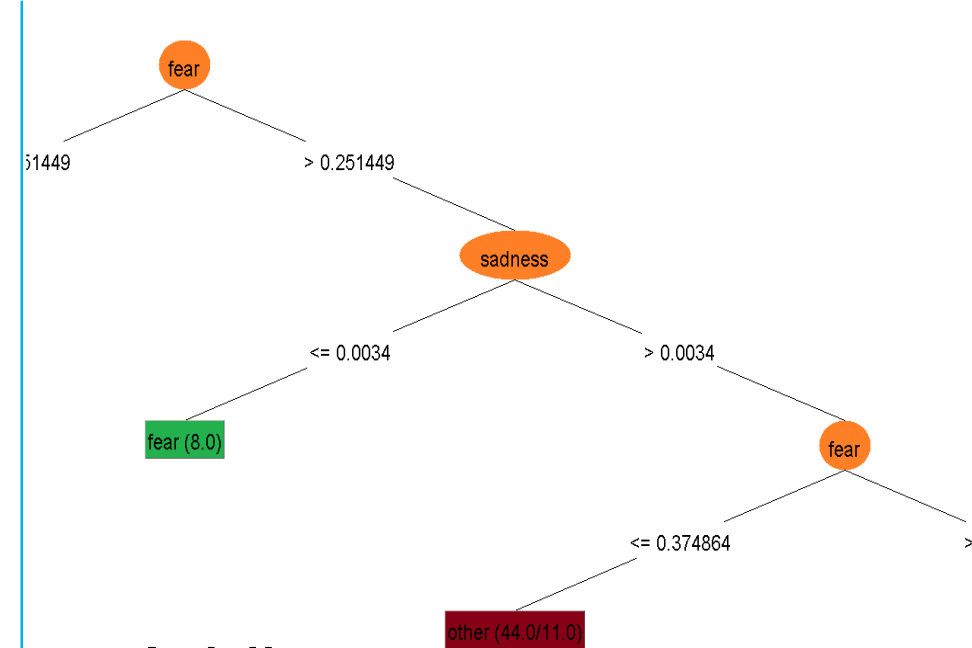
Capturing the sound

Step 2



- Preprocessing
- Extracting signals
- Extracting Emotions

Step 3



- Adding context Information
- Minimizing the error

Step 4



Using the information in a model, app or system