AI personalised models based on subjective data

Francesca Gasparini[1,2,*]

[1]*University of Milano-Bicocca, Viale Sarca 336, 20126, Milano, Italy*

[2]*NeuroMI, Milan Center for Neuroscience, Piazza dell'Ateneo Nuovo 1, 20126, Milano, Italy*

Abstract

Nowadays wearable devices and environmental sensors allow us to easily collect data related to subjects' emotions and behaviour.

Advanced human system interfaces can benefit from this data, taking into account the emotions involved in the interaction. The affective computing cycle that is the basis of these applications will be presented, highlighting its limits and potentials. The same kind of data can be extremely useful also in applications that do not imply active subject interactions, such as remote monitoring especially in case of frail people.

The role of data quality, inter and intra-subject variability will be discussed to provide hints to evaluate the reliability of personalised AI models.

Case studies will be re presented and critically discussed.

Keywords

Wearable devices, Emotion and behaviour recognition, Advanced human-system interfaces, Affective computing, Subjective data

---

*Corresponding author.

✉ francesca.gasparini@unimib.it (F. Gasparini)

🌐 https://mmsp.unimib.it/ (F. Gasparini)

🆔 0000-0002-6279-6660 (F. Gasparini)