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## MATE robots simplifying my work: The benefits and socioethical implications

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With the increasing complexity of modern industrial automatic and robotic systems, an increasing burden is put on the operators, who are requested to supervise and interact with such complex systems, typically under challenging and stressful conditions. To overcome this issue, it is necessary to adopt a responsible approach based on the anthropocentric design methodology, such that machines adapt to the humans capabilities. To this end, we have developed an integrated methodological design approach, which we call MATE,

consisting in devising complex automatic or robotic solutions that measure current operator's status, adapt the interaction accordingly, and provide her/him proper training to improve the interaction and learn lacking skills and expertise. Accordingly, a MATE system is intended to be easily usable for all users, thus meeting the principle of inclusive design. Using such a MATE system gives rise to several ethical and social implications, which are discussed in this talk.

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