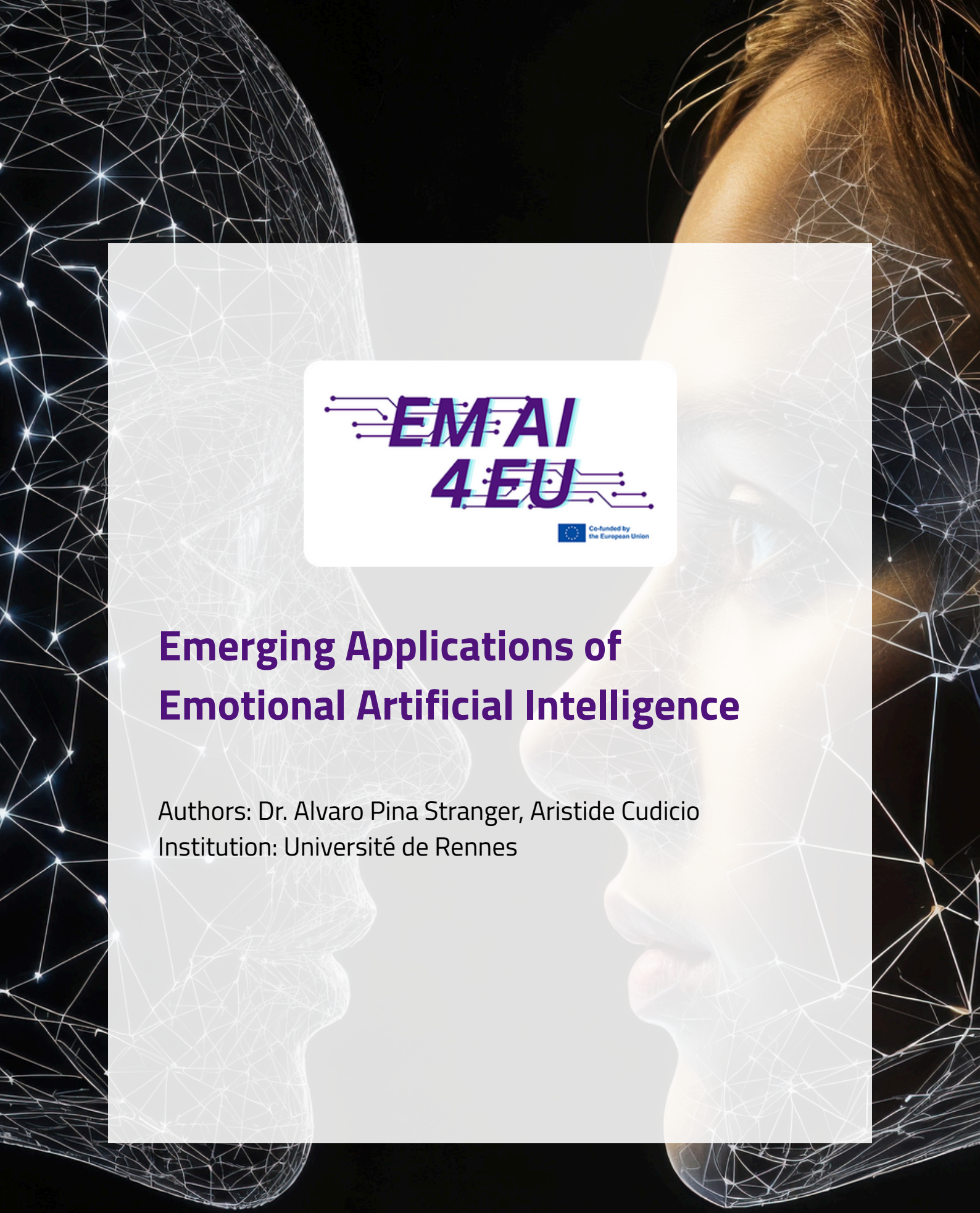

Emerging Applications of Emotional Artificial Intelligence

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When discussing emotional artificial intelligence, we refer to computational approaches that model human emotions and treat emotional states as relevant inputs for decision making. Current systems rely on the detection of facial expressions, vocal patterns, and other behavioural cues to infer emotions and trigger context-appropriate responses. Research in this area covers both emotion recognition and the generation or simulation of emotions in human-machine interaction.

This field is widely debated because it raises major ethical concerns, notably in relation to privacy, manipulation, and misinterpretation. At the same time, the capacity to recognise or elicit emotions may increase effectiveness in settings where emotional dynamics influence behaviour, interaction, and choice. The growing attention to emotional competencies in corporate recruitment practices illustrates this emerging relevance.

The analysis presented here examines the innovative value of emotional AI. It is based on a structured review of approximately 80 academic publications identified through searches for “emotional AI,” “emotional artificial intelligence,” and related expressions across major scholarly platforms. In addition, around forty press articles, primarily in French, were examined to capture the contours of the public debate.

Academic and press sources were analysed separately. Themes and keywords were extracted to classify the innovative issues most frequently cited and the ones currently most developed.

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The literature shows that critical perspectives on emotional AI are already well articulated, whereas real-world implementation remains limited. Most academic work focuses on technical experiments designed to improve the reliability of emotional detection and explores a small number of application contexts. Empirical studies are still scarce, often relying on small or non-representative samples. Consequently, many anticipated benefits remain largely hypothetical, while ethical and operational risks are consistently highlighted, especially in domains where human experience is central.

Four sectors currently stand out as recurrent areas of investigation: healthcare, education, management, and sales.

In healthcare, emotional AI attracts extensive discussion due to its potential risks, yet it is also the most active area of development. Everyday practices already show a rapid uptake of conversational agents for emotional support and advice. The permanent availability of such systems is frequently presented as a partial response to difficulties in accessing psychological care, in terms of both cost and availability. These uses are reinforced by a tendency to anthropomorphise systems that communicate through natural language. Research also examines whether medical staff find it acceptable to be assisted by AI in morally difficult decisions, particularly in end-of-life care. While future deployment is not viewed negatively in principle, it is commonly considered premature given current technical maturity.

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In education, learners' emotional states are known to influence learning quality and continuity. Experiments therefore seek to train systems to detect these states in order to adjust content or pace and sustain engagement. The objective is not only to identify emotions but also to foster emotional conditions that support learning. Available evidence also suggests that students do not reject such tools by default; attitudes tend to reflect curiosity more than apprehension, which is a significant factor for responsible innovation in education.

In human resources and management, the monitoring of emotional states is explored as a means to optimise team organisation, anticipate burnout, and reduce turnover risks. Emotional AI is also considered as a potential support in strategic decision processes, provided that its limitations and ethical boundaries are clearly addressed.

In sales, emotions play a central role in purchasing behaviour. Emotional AI is therefore investigated for personalising recommendations and shaping purchasing experiences that are both individualised and emotionally engaging. Real estate and luxury goods are particularly prominent in the literature. In real estate, combining AI-based emotional insights with human expertise may enhance responsiveness, empathy, and service quality. In luxury markets, emotional AI is often linked to immersive technologies such as holograms, humanoid robots, and virtual reality, aiming to create distinctive experiences. It may also serve as a decision support tool, for example in voice-based assistance for product selection, and as a mechanism for preserving and transmitting tacit expertise within firms.

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Overall, emotional AI remains an emerging area with limited large-scale deployment, but with application prospects across any context where emotions shape action, interaction, and decision making. These developments underline the need for advanced training that combines technical competence, empirical evaluation, and rigorous ethical reflection.

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