

Human-Computer Interaction approach with Empathic Conversational Agent and Computer Vision

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Abstract. The abstract should briefly summarize the contents of the paper in 150–250 words.

Keywords: First keyword · Second keyword · Another keyword.

1 First Section

Research topics: • Human-Computer Interaction (HCI): ◦ Explainable Deep Learning in HCI (explain how HCI and DL crossed paths using Chatto's paper) ◦ Emotion Recognition (Face, Pose, Text, Speech, Methods, Datasets) ◦ Conversational Agents (Embodied, Interaction, Domain, Goal, Methods, Datasets) ◦ Application: Proposed architecture/solution Contributions: 1. Explanation of how Deep Learning impact HCI nowadays 2. A brief review of Emotion Recognition and Conversational agents topics 3. Exposure of the main used methods and datasets used for emotion recognition and conversational agents 4. A proposal of a taxonomy regarding HCI, DL, CA, and ER. 5. The proposal of an architecture of a Human Computer Interaction approach with an Empathic Conversational Agent and Computer Vision Results/Prototype characteristics: 1. Multi-modal CA able to recognize and monitor older adults' emotions through pose, and face features along with text and speech captured from interactions. 2. CA able to aid older adults in regulating and counterbalancing negative emotions while maintaining positive emotions positive.

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References

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