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Preface to the Proceedings of the 1st International Workshop on Sentiment Analysis and Emotion Recognition for Social Robots (SENTIRobots'22)

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Social Robotics is demanding more sophisticated algorithms to improve Human Robot Interaction (HRI) and social behaviours of robots, in particular in crowded environments. Sentiment Analysis, Emotion Recognition, and Proxemic Interactions are becoming essential aspects to consider when service or social robots are involved. Key aspects in the study of this area includes different research questions, such as how to manage the sensory capacity of robots to gather the information needed for the recognition of human emotions or to capture the DILMO (Distance, Identity, Location, Movement, Orientation) dimensions of people and objects, how to improve machine learning techniques to be suitable for social robots, how to manage different emotional modalities with efficient fusion methods, how ubicomp environments should be designed to benefit from proxemic interactions, how robots reach social behaviours based in emotional recognition and proxemics. With this interest was designed the first edition of the workshop SENTIRobots (Sentiment Analysis and Emotion Recognition for Social Robots) This workshop provided a venue for members from a range of international institutions, including universities, research labs, and industry to exchange ideas and experiences, analyse, present, and discuss latest research and development issues, and propose theoretical foundations. The focus was related to research on combining solutions for developing efficient and suitable solutions for emotional recognition, as well as designing proxemic interactions for social robots. This synergistic focus enforces the engineering of intelligent and innovative solutions in this regard to guide their design and to promote the development of new approaches (architectures, tools, and models) of emotion/sentiment recognition for social robots and proxemic HRI. This first edition of the workshop has accepted for publication and presentation seven papers that reflect the latest research development, focusing on pushing the boundaries of the current state of the art and contributing to multimodal emotional understanding, unsupervised domain adaptation, datasets to

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train and validate emotion recognition models, and social path planning and navigation based on proxemics.

We are grateful to Dr. Erik Cambria and Dr. Pedro M. Núñez Trujillo for accepting our invitation to give the keynote speeches of this edition. Their respective talks focus on neurosymbolic AI for sentiment analysis and emotion recognition and socially-aware robot navigation based on proxemics. We wish also to express our sincere thanks to the authors of the submitted papers for their very interesting and high-quality contributions; SENTIRobots'22 Program Committee members, for their excellent work and invaluable support during the review process; and IE'22 Workshops Chairs, for their help and support, and IE'22 conference for hosting this workshop. All of them have made possible to successfully organise the first edition of this workshop, which we hope to consolidate year after year.