Indriya : An intuitive interface for designing social behaviors of humanoid robots for human-in-the-loop scenarios

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***Abstract*— Humans interacting with intelligent robots has been seen as a potential game changer of the future. In scenarios where robots coexist with humans in a social environment, understanding not only verbal communication, but also non-verbal communication is extremely inevitable. The non-verbal communication carries information such as intention, emotion and health of a human, that adds value to the way robots participate in an interaction. Additionally, the people who design interaction scenarios are from diverse fields who do not essentially have the required robot programming skills. In this paper we propose an easy to use and intuitive programming interface which gives the power to design robot behaviors taking into account human motions. We propose a distributed system namely Indriya which gives the capability to plug and play multi-modal motion recognition systems and diverse class of robots. We present results of NAO humanoid robot performing actions understanding human motions using Kinect motion recognition system.**

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$$\alpha + \beta = \chi \tag{1}$$

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TABLE I
AN EXAMPLE OF A TABLE

One	Two
Three	Four

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Fig. 1. Inductance of oscillation winding on amorphous magnetic core versus DC bias magnetic field

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APPENDIX

Appendixes should appear before the acknowledgment.

ACKNOWLEDGMENT

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References are important to the reader; therefore, each citation must be complete and correct. If at all possible, references should be commonly available publications.

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