Developing common sense model for mobile service robot

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October 2021

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1)DECLARATION

I declare that this is my own work and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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The above research for the Master of Science in Information Technology Dissertation under my supervision.

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2) ACKNOWLEDGEMENTS

3)ABSTRACT

Enhance the chance to identify the instructions or incomplete sentence given by a human as a command sentence by using the Natural Language processing and model creating. It would be facilitating the interaction between the human and mobile service robot.

However, when human give the instruction there can be incompleteness or else missing. Which information that are related to the environment. That because of human normally based on the common sense depend on the environment. Then human brain will complete all those incomplete sentences by using the commonsense knowledge. In this research project itself, introduced a model of a service robot who can compete the given incomplete instructions and display the related sentences or words and finally move to the related objects which are in the environment of the robot. All those things happen by using a simulator. To this first it will consider and identify the objects in environment and then consider the given natural language instruction by human. As a first step of the approach complete the incomplete sentences those sentences are coming as natural language instructions. By parsing it into as the frame can identify the related words by using the created model or can call as language model and here used some identify words from the human common sense also, using those identified words as a first step create the code and then implement the model. then the service robot will learn about the commonsense knowledge automatically from the parsing sentences as a speaker. Considering all the parsing sentences it calculates and measure the accuracy of this service robot model. Simply this is a commonsense reasoning model. The result of the provided solution can enable the robot model who works in ROS environment to identify and automatically perform to the tasks.