LIST OF PUBLICATIONS ORIGINATED FROM THE THESIS

Refereed Journal Publications

1. **M. A. V. J. Muthugala**, and A. G. B. P. Jayasekara, "A Review of Service Robots Coping With Uncertain Information in Natural Language Instructions," *IEEE Access*, vol. 6, pp. 12913-12928, 2018.

2. **M. A. V. J. Muthugala**, and A. G. B. P. Jayasekara, "Enhancing User Satisfaction by Adapting Robot's Perception of Uncertain Information Based on Environment and User Feedback," *IEEE Access*, vol. 5, pp. 26435–26447, 2017.

3. **M. A. V. J. Muthugala**, P. H. D. A. S. Srimal and A. G. B. P. Jayasekara, "Enhancing Interpretation of Ambiguous Voice Instructions based on Environment and User's Intention for Improved Human Friendly Robot Navigation," *Applied Sciences special issue on Social Robotics*, vol. 7, no. 8, 2017.

4. **M. A. V. J. Muthugala**, and A. G. B. P. Jayasekara, "Improving understanding of navigational commands by adapting robot's directional perception based on environment," [under review]

5. **M. A. V. J. Muthugala**, P. H. D. A. S. Srimal, and A. G. B. P. Jayasekara, "Improving Robot's Perception of Uncertain Spatial Descriptors in Navigational Instructions by Evaluating Influential Gesture Notions," [under review]

Refereed International Conference Publications[1]

1. **M. A. V. J. Muthugala** and A. G. B. P. Jayasekara, "Interpreting Uncertain Information Related to Relative References for Improved Navigational Command Understanding of Service Robots," in *2017 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Vancouver, IEEE, 2017, pp. 6567–6574.

2. **M. A. V. J. Muthugala** and A. G. B. P. Jayasekara, "Interpreting Fuzzy Directional Information in Navigational Commands Based on Arrangement of the Surrounding Environment," in *2017 IEEE International Conference on Fuzzy Systems (FUZZ IEEE)*, Naples, IEEE, 2017, pp. 1-7.

3. **M. A. V. J. Muthugala** and A. G. B. P. Jayasekara, "Interpretation of Uncertain Information in Mobile Service Robots by Analyzing Surrounding Spatial Arrangement Based on Occupied Density Variation," in *2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Daejeon, IEEE, 2016, pp. 1517-1523.

4. **M. A. V. J. Muthugala** and A. G. B. P. Jayasekara, "Enhancing Human-Robot Interaction by Interpreting Uncertain Information in Navigational Commands Based on Experience and Environment," in *2016 IEEE International Conference on Robotics and Automation (ICRA)*, Stockholm, IEEE, 2016, pp. 2915-2921.

5. **M. A. V. J. Muthugala** and A. G. B. P. Jayasekara, "MIRob: An Intelligent Service Robot that Learns from Interactive Discussions while Handling Uncertain Information in User Instructions," in *2016 Moratuwa Engineering Research Conference (MERCon)*, Moratuwa, IEEE, 2016, pp. 397-402. [**Best paper award**]

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[1]Only the first author and accepted/published papers at the time of submission are listed here.

6. **M. A. V. J. Muthugala** and A. G. B. P. Jayasekara, "Interpreting Fuzzy Linguistic Information in User Commands by Analyzing Movement Restrictions in the Surrounding Environment ," in *2015 Moratuwa Engineering Research Conference (MERCon)*, Moratuwa, IEEE, 2015, pp. 124-129.

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