**LISTED RESPONSE TO COMMENT/SUGGESTIONS OF**

***REVIEWER 3***

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| --- | --- | --- | --- |
| ***No*** | ***Reviewer’s Comment/Suggestion*** | ***Author’s Comment*** | ***Action Taken\*\*\**** |
| 1 | In the description of D\* Lite, I think that k\_1(s) = min(g(s),rhs(s)+h(s,s\_{goal}) ) should be k\_1(s) = min(g(s),rhs(s)) + h(s,s\_{goal}). |  |  |
| 2 | Novelty of the paper has not been highlight clearly. The authors claimed that they proposed a GA base multi-objective path planner. However, such GA based planner has been widely studied in literature. I cannot find the new thoughts in Section IV. Please rewrite this paragraph and clearly state what is new. In addition, the author extend single objective optimization to the multi-objective optimization, is this Pareto optimal result? Any differences and why the proposed methods are needed? |  |  |
| 3 | It is good to see that the authors use large paragraph to compare the results But I would like to see the authors analyze the time and space complexity of the algorithm. |  |  |
| 4 | Clear explanation of Figure 5 is necessary. |  |  |
| 5 | In the introduction part, authors claimed that current results are not the incremental method. I think you need to do a better literature review. Please be aware of following related papers on the GA multi-objective path planning, the pareto-optimal multi-objective optimization. "K-Order Surrounding Roadmaps Path Planner for Robot Path Planning", Journal of Intelligent & Robotic Systems September 2014, Volume 75, Issue 3-4, pp 493-516; "Sampling-based algorithms for optimal motion planning" International Journal of Robotics Research, Volume 30 Issue 7, June 2011; "Pareto-optimal coordination of multiple robots with safety guarantees" Autonomous Robots, 32(3): 189-205, 2012. Game theory-based negotiation for multiple robots task allocation, Robotica, DOI: 10.1017/S0263574713000192 . "Multiple Objective Genetic Algorithms for Path-planning Optimization in Autonomous Mobile Robots.", Soft Computing, DOI: 10.1007/s00500-006-0068-4. |  |  |

*\* Throughout the letter, the section and figure numbers are referred to our revised version of the paper, unless it is specified as in old version.*

*\*\* Throughout the letter, all figures and tables included in the Appendix of this letter are specified as “in Appendix below”.*

*\*\*\* In the revised manuscript, all textual insertions are marked with red, deleted ones with green.*

**References**

**Appendix**