

Review of: "Optimal Latency Compensator for Improved Performance of Teleoperated UGVs on Soft Terrains"

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Potential competing interests: No potential competing interests to declare.

1. It would be better to describe your proposed GA algorithm: whether it is identical to the classic one or you made some modifications customized to this application.
2. I am wondering if the first cost term in (12) is drafted correctly. The term $t(x(t) - \hat{x}(t))$ aims to regularize the difference as time goes by: the term would have a larger cost if the prediction does not work well in the long future. If so, why don't we regularize the overshoot difference using the same method?
3. For the varying delay case, do you try the delay generator provided by Yingshi in the paper "A Predictor Based Framework for Delay Compensation in Networked Closed-Loop Systems"? I think it provides a better (realistic) delay pattern than the varying delay with a uniform distribution. But this is just a minor suggestion for future improvement.
4. For the experiment, based on my understanding of the essence of the paper, the proposed algorithm is designed to optimize performance. As a result, in the human subject study, the comparison should be conducted between the GA-optimized predictor and a normal predictor in the literature. The case without a predictor and the case with an optimized predictor, which is presented in the paper, seem to be wrong choices to prove your contribution: The performance improved from a predictor framework has already been validated by previous work and, as a result, should not be the major focus of this work.

Overall, this is well-drafted work with a rigorous structure. The results are promising. I suggest acceptable publication with minor revision after addressing the comments above, especially points 1, 2, and 4.