On p.2 “to trade the combinatorial – [?]”, should add a noun here. Maybe, “scaling issues”

p.4, Sec IV: “Given a start and a goal configurations” is awk. Maybe, “given start and goal configurations” (or else a start and a goal configuration).

p.5, on right, “less than epsilon” between end effector and world – but doesn’t the orientation of the end effector matter tremendously here, too?

p.6 “a start and goal root configurations” – should drop last s

p.6 – this would be a great place to give more “intuition” for the heuristics. Hw seems to be used in essentially all foot contact, with h_efort for hand/arm contacts, and ALSO h_vel not seeming to be used at all.

p.6, Fig 7 – not really a “steep” (?) staircase… (especially compared with Table V data)

p.6 ‘three-fingered hand’ – slightly misleading, since no rolling (as fully admitted in the text). I’d just cut this?

p.8– somehow, “Table II” doesn’t appear until after “Table IV” – which is a frustrating choice for latex to make. Not sure what you can do to change that, but it would be preferable to have tables (and figures) appear in the correct order.

p.8 Sensitivity and Specificity discussion and data. Need to be more clear what these mean., e.g., via an intuitive example.

p.8 “requiring to exert important forces” is awkward. Perhaps change to, “requiring significant force production” or “in which significant forces must be exerted” or “requiring large magnitude contact forces” or maybe [to get your point across more clearly, as well]:
“in which achieving the necessary directions and magnitudes of contact forces intuitively requires some consideration of the Jacobians associated with the postures chosen in motion planning”

p.8. Need to define “discretization step” more precisely, I think(?)… Min distance? Max distance? Nominal distance? In time? In Distance? In all 6 DOF??

p.8 “analyzed their success rate” seems like “their” refers to “computation time”. Just change to “analyzed success rate”

p.8 Near end, “thus allowing to consider” – also awkward. Just use “thus enabling”

p.8 Near end. “the more constrained… the less…” drop the “the’s”, e.g. “a more…” and then just “less” (w/out the “the”)

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p.9 Not sure if Fig. 14 is worth including… It looks like its just Fig. 9 from the ISRR paper (?) [20], and there is still no "full solution" here – just an illustration of potential future work. (At a minimum, the figure/solution should probably be referenced as having already appeared in the previous ISSR paper?)

p.9 near end, Sec. VII – would replace "interest" with something else, maybe "purpose" – both in the section title and in the first sentence of that section.

p.9 'addresses highly constrained environment' – actually, not very well, correct? This was the "exception" case, for which results were rather poor, right? Also a case where "heuristics" are not so good for getting true (reliable) holds on grasp points, etc.?

p.12 The first part of App. B is referred to within this Appendix as "new minor contributions derived from previous work". These aren't so novel, perhaps, and what is more useful to the reader is a better intuition for when to use each within the MAIN BODY of the paper, where they are originally described/associated to particular simulations.

p.12 The "manipulability measure h_w" is said to be "also given by "Yoshikawa". Go ahead and provide that as a citation to an appropriate paper or other reference source, if possible, e.g., [32] (I believe?). […and if you found out about this older work through some newer publication, it's best to mention both.]

p.12 pyramid friction cone – it's not clear this is "conservative"… e.g., a square "within" a circle vs "outside" a circle… this sounds like the pyramid is outside, which means sometimes things would actually slip – which is not "conservative"…

p.13 after Eq. (15), "rather than solving directly (19)…." – do you mean "(15)"?

p.13, perhaps be more clear (very briefly) in mapping (scalar) solution b0 to solution of v (R^6) in (16).

p.13 – github link seems to be dead? (The link on p. 15 is OK… should they be the same?)

p.13 – after equation (17), suppress indentation.

p.14 – not a good description of the simulation software used… Ref [38] focuses on robustness of simulations, but presumably, the testing in the present work is deterministic – just using the same simulator? Not much description is given of how/whether contacts/slipping are modeled… why isn't a 3rd-part software used, or at least software with better documentation? Better info is needed to understand what the "simulations" truly represent.

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