

# Review of: "Design and Realization of a Low-Cost Smart Walking Aid for Visually Impaired and Blind People"

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**Potential competing interests:** No potential competing interests to declare.

This paper addresses the good potential (in terms of affordability, accuracy, and usefulness) of a smart device designed to assist visually impaired or blind people. The paper is clear, well-structured, and follows most of the conventions of original articles retrieved from the literature. Overall, the equipment described and its performance in detecting both solid obstacles and water seem promising. However, I would suggest some edits and perspectives that the authors may consider in order to make their paper sounder.

First, I would suggest language harmonization (i.e., using US English) and some additions in the background section, as references are lacking. References could also be used to discuss the usability of the device in view of the current literature about advances in assistive technology to support people with multiple disabilities. A separate section where these preliminary results and future prospects can be discussed may be beneficial to gain a better understanding of how to use this technology and which tests other than performance ones (e.g., user experience in view of the wires and the several accessories) can be run, besides considerations about the clinical translatability of these tests. Regarding the POE results, it would be better to provide some more details within the caption or text. Moreover, it would be appropriate to disclose both the ethical, methodological, and technological standards applicable to the study and the prototype presented.

Besides having read and reviewed the article independently, I also agree with another reviewer's comment concerning the provision of explanations for the adjective "intelligent" used to describe this innovative IoT solution.