

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.

The paper presents a socially impactful solution with its low-cost smart walking aid. The use of Arduino and modular design approach are commendable, aligning well with the needs of developing countries. However, to strengthen the paper and maximize the device's impact, the authors should focus on updating their literature survey, incorporating user feedback, addressing potential adoption challenges, and embracing open-source sharing of their design and code. These improvements would not only enhance the paper's technical rigor but also contribute to the broader field of assistive technologies for visually impaired individuals.

Below are key areas to consider for improving the article:

Lack of State-of-the-Art Literature Survey: The paper falls short in presenting a comprehensive literature review of current advancements in the field. There is a noticeable absence of up-to-date references, which raises questions about the novelty and relevance of the proposed solution in the context of current technological developments.

User Feedback and Adoption Challenges: There is a significant gap in user experience feedback. Incorporating feedback from visually impaired individuals who have tested the device would provide invaluable insights into its practicality, comfort, and real-world functionality. Additionally, the paper does not address potential challenges in the adoption of the device, such as user training, maintenance, and cultural acceptance, which are critical in the context of developing countries.

Open Source Sharing of Design and Code: To enhance the impact and credibility of their work, the authors should consider uploading the design schematics and code files to a platform like GitHub. Open sourcing these elements not only facilitates peer review and collaboration but also ensures that others can replicate and build upon their results, fostering innovation and widespread adoption.