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An Edge Detection Framework Conjoining with IMU Data for Assisting Indoor Navigation of Visually Impaired Persons

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Highlights

- A framework with IMU is proposed to aid object detections for moving camera
- It overcomes existing approaches that cannot detect contaminated image edges
- It overcomes deblurring algorithms that are not suitable for real-time implementation
- Its topological structure is adapted continuously for changing indoor environment
- Results show it is a strong candidate for reliable real-time navigation

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