

## Conception of a Reliable Low Cost, Autonomous Explorative Hovercraft 1

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**Abstract :** The paper presents actual benefits and drawbacks of a multidirectional Hovercraft conceived with limited resources and designed for indoor exploration. Recent developments in the field have led to apparition of very powerful automotive systems capable of very high calculation and exploration in complex unknown environments. They usually propose very complex algorithms, high precision/cost sensors and sometimes have heavy calculation consumption with complex data fusion. Those systems are usually powerful but have a certain price and the benefits may not be worth the cost, especially considering their hardware limitations and their power consumption. Present approach is to build a compromise between cost, power consumption and results preciseness.

**Keywords :** Hovercraft, indoor exploration, autonomous, multidirectional, wireless control

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