RB5: A Real-Time Low-Cost Wheeled Robot for Autonomous Large-Scale Exploration

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***Abstract*—In this paper, we present a robotic system-of-systems involving a six-wheel mobile robot with resilient autonomy, as well as mapping, planning, and navigation capabilities to explore complex ground and underground environments.**

***Index Terms*—Article submission, IEEE, IEEEtran, journal, LaTeX, paper, template, typesetting.**

I. Introduction

MOBILE robots are incresingly used in use cases involving both indoors and outdoors autonomous exploration. In such use case, the robot is required to identify all its surroundings including obstacles and point of interest by sensing the environment [1], with little to none human interaction.

References

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Manuscript received: Month, Day, Year; Revised Month, Day, Year; Accepted Month, Day, Year.

This paper was recommended for publication by Editor Editor A. Name upon evaluation of the Associate Editor and Reviewers' comments.

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Digital Object Identifier (DOI): see top of this page.