

## **Deadline Missing Prediction for Mobile Robots through the Use of Historical Data**

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**Abstract :** Mobile robotics is gaining an increasingly important role in modern society. Several potentially dangerous or laborious tasks for human are assigned to mobile robots, which are increasingly capable. Many of these tasks need to be performed within a specified period, i.e., meet a deadline. Missing the deadline can result in financial and/or material losses. Mechanisms for predicting the missing of deadlines are fundamental because corrective actions can be taken to avoid or minimize the losses resulting from missing the deadline. In this work we propose a simple but reliable deadline missing prediction mechanism for mobile robots through the use of historical data and we use the Pioneer 3-DX robot for experiments and simulations, one of the most popular robots in academia.

**Keywords :** deadline missing, historical data, mobile robots, prediction mechanism

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