

ANALYSIS OF INDIRECT ENVIRONMENTAL MEASUREMENT TO MAKE OCCUPANCY ESTIMATION IN INDOOR AREAS

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Abstract

Occupancy in indoor areas can be estimated using different technological and methodological solutions, whose complexity increases according to the required performance.

The main approaches can be divided in two categories that use indirect and direct measurements. In this project activity will be analyzed the use of indirect measurements to estimate the occupancy. In this category the occupancy is inferred from the perturbation of indirect environmental parameters like temperature and humidity. The main advantage is the low complexity of the adopted hardware. However, the methodology for data processing is very complex because the correlation between environmental data and people presence is not trivial. The goal of this project is to analyze some indirect measurements measured in real environments, in order to detect data patterns or behaviors that can be exploited to estimate the indoor occupancy.

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