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A MULTI -AGENT SYSTEM FOR MONITORING AND ANALYZING THE AIR QUALITY INDEX

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Abstract

There has been an increasingly awareness over the environmental impact of human activities, along with the exponential industrial growth, over the last decades. One of the negative important issues is the air pollution and its impact over the human health in recent years. Therefore, there have been initiated several laws and projects in order to monitor, analyze and forecast the evolution of the most important air pollutants. In this paper, it have been designed a multi agent system based model to simulate the distributed air quality monitoring process which can be used in the air pollution decision process. Each local monitoring station can be modelled as an intelligent agent and therefore the entire air quality network can be geographically distributed as a multi agent system. The experimental results show that intelligent agents can be successfully used in air quality monitoring and analyzing domain.

Key words: air pollutants, Air Quality Index, intelligent system, multi agent system

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