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A Methodology to Develop an Outdoor Activities Recommender Based on Air Pollution Variables

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Abstract

Nowadays, the world faces a high level of environmental pollution. This phenomenon has become a constant challenge for our society due to its negative impact on health and the increased risk of disease. Considering this problem, applications, techniques and methodologies are generated that seek

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to relate atmospheric pollutants to each other to predict the state of the air. On the other hand, recommendation systems are present in numerous decision-making methods to find trends in various fields. Consequently, this work presents a methodology for a recommender system that provides people with the best hours to perform outdoor activities according to the pollutants found in the environment. The results obtained were verified through an evaluation and thus be able to contribute to the creation of new recommenders based on the previous topics. © 2022, The Author(s), under exclusive license to Springer Nature Switzerland AG.


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Air pollutants; Air quality; Data mining; Meteorological variables; Recommender systems

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
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