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Predicting Microbial Species in a River Based on Physicochemical Properties by Bio-Inspired Metaheuristic Optimized Machine Learning

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Abstract

The primary objective of the examination of microbial nature is to comprehend the connection between Earth's microbial network and their capacities in the earth. This paper presents a proof-of-idea exploration to build up a bioclimatic displaying approach that uses man-made reasoning procedures to distinguish the microbial species in a stream as a component of physicochemical boundaries. Highlight decrease and determination are both used in the information preprocessing attributable to the scant of accessible information focuses gathered and missing estimations of physicochemical ascribes from a waterway in Southeast China. A bio-roused metaheuristic upgraded machine student, which bolsters the change in accordance with the numerous yield forecast structure, is utilized in bioclimatic demonstrating. The exactness of expectation and pertinence of the model can support microbiologists and scientists in measuring the anticipated microbial species for additional exploratory arranging with negligible use, which is gotten one of the most major issues when confronting emotional changes of natural conditions brought about by an Earth-wide temperature boost. This work exhibits a neoteric approach for expected use in anticipating primer microbial structures in nature.

Biography:

Billy Susilo obtained his B.Eng in civil construction engineering and project management department at Petra Christian University, Surabaya, Indonesia. Afterwards, he received full scholarship from Taiwan government to pursue his master degree at National Taiwan University of Science and Technology, Taipei, Taiwan, and did research collaboration with environmental engineering department of National Taiwan University, Taipei, Taiwan. Besides graduated as best

Graduated student during his master degree period, he also receive awards as one of the best speaker for his research in 22nd Symposium on Construction Engineering and Management. His research focuses on engineering informatics, optimization on machine learning algorithm and metaheuristic artificial intelligence techniques. Currently, he is a data supervisor senior engineer in one the biggest geotechnical real-time monitoring construction company in Taiwan.

Speaker Publications:

1. "Sanghoon Baek & Sangchul Kim, 2019. "Optimum Design and Energy Performance of Hybrid Triple Glazing System with Vacuum and Carbon Dioxide Filled Gap," Sustainability, MDPI, Open Access Journal, vol. 11(19), pages 1-17, October.
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