Comparative Study of Different Data Mining Techniques in Predicting Forest Fire in Lebanon and Mediterranean

Titre	Comparative Study of Different Data Mining Techniques in Predicting Forest Fire in Lebanon and Mediterranean
Type de publication	Communication
Type	Communication avec actes dans un congrès
Année	2016
Langue	Anglais
Date du colloque	21-22/09/2016
Titre du colloque	SAI Intelligent Systems Conference 2016 (IntelliSys 2016)
Titre des actes ou de la revue	Proceedings of SAI Intelligent Systems Conference (IntelliSys) 2016
Volume	1
Pagination	747–762
Auteur	Hamadeh, Nizar [1], Karouni, Ali [2], Daya, Bassam [3], Chauvet, Pierre [4]
Editeur scientifique	Bi, Yaxin [5], Kapoor, Supriya [6], Bhatia, Rahul [7]
Pays	Royaume-Uni
Editeur	Springer International Publishing
Ville	Londres
ISBN	978-3-319-56994-9
Mots-clés	classification [8], data mining [9], Forest fire prediction [10], meteorological data [11]
Résumé en anglais	Forest fire is one of the most complex phenomena which can cause great economic losses and make eco-environment seriously disordered. Forest fire has caused the loss of many green acres in Lebanon due to the lack of governmental policies in order to mange forest fires. This paper presents an overview of the exciting applications of data mining techniques in different fields. This study aims to predict forest fires in North Lebanon in order to reduce fire occurrence based on 4 meteorological parameters (Temperature, Humidity, Precipitation and Wind speed) using different data mining techniques: Neural networks, decision tree (J48), fuzzy logic, support vector machine (SVM) and linear discriminant analysis (LDA). A comparative study is then made to find the best performing technique tending to manage such a natural crisis. Decision tree (J48) recorded the best accuracy in forest fire prediction (97.8{%}).
URL de la notice	http://okina.univ-angers.fr/publications/ua17064 [12]
DOI	10.1007/978-3-319-56994-9_51 [13]

Lien vers le document en ligne	https://link.springer.com/chapter/10.1007/978-3-319-56994-9_51 [14]

Liens
[1] http://okina.univ-angers.fr/nhamadeh/publications
[2] http://okina.univ-angers.fr/publications?f%5Bauthor%5D=3746
[3] http://okina.univ-angers.fr/publications?f%5Bauthor%5D=2091
[4] http://okina.univ-angers.fr/pierre.chauvet/publications
[5] http://okina.univ-angers.fr/publications?f%5Bauthor%5D=28388
[6] http://okina.univ-angers.fr/publications?f%5Bauthor%5D=28389
[7] http://okina.univ-angers.fr/publications?f%5Bauthor%5D=28390
[8] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=1301
[9] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=8631
[10] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=24726
[11] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=24727
[12] http://okina.univ-angers.fr/publications/ua17064
[13] http://dx.doi.org/10.1007/978-3-319-56994-9_51
[14] https://link.springer.com/chapter/10.1007/978-3-319-56994-9_51

Publié sur *Okina* (http://okina.univ-angers.fr)