

	FORM FOR PROPOSING A TOPIC IN THE SECOND CYCLE OF STUDIES	Oznaka	SAO-FENS.4.24.0-ENG
		Datum usvajanja	05.03.2019
		Datum/Br. revizije	-
		Stranica	1/1

Department	Information Technologies
Master thesis title:	Compariosn of different type of Ensemble ML methods for epileptic seizure prediction applied on pedriatic data using Hadoop Environment
Mentor/professor - contact:	Samed Jukic

Thesis background:	The aim of this study is to contribute to the diagnosis of epilepsy by taking advantage of the engineering. So, for diagnosing of epileptic seizures from EEG signals are transformed discrete wavelet and auto regressive models
Thesis objective:	The aim of this study is to diagnose epileptic seizures by using different machine learning algorithms
Literature:	<p>Bekir Karlık and Şengül Bayrak Hayta, Comparison Machine Learning Algorithms for Recognition of Epileptic Seizures in EEG, Proceedings IWBBIO 2014. Granada 7-9 April, 2014</p> <p>Khald A. I. Aboalayon ; Wafaa S. Almuhammadi ; Miad Faezipour, A comparison of different machine learning algorithms using single channel EEG signal for classifying human sleep stages, 2015 Long Island Systems, Applications and Technology</p> <p>Emad A Mohammed, Behrouz H Far and Christopher Naugler, Applications of the MapReduce programming framework to clinical big data analysis: current landscape and future trends, BioData Mining 2014, 7:22</p> <p>Wenmin Lin, Wanchun Dou, Zuojian Zhou, Chang Liu, A cloud-based framework for Home-diagnosis service over bigmedical data, The Journal of Systems and Software xxx (2014) xxx-xxx</p>

	FORM FOR PROPOSING A TOPIC IN THE SECOND CYCLE OF STUDIES	Oznaka	SAO-FENS.4.24.0-ENG
		Datum usvajanja	05.03.2019
		Datum/Br. revizije	-
		Stranica	1/1

Department	Information Technologies
Master thesis title:	Epileptic Seizure Recognition using Ensemble ML methods
Mentor/professor - contact:	Samed Jukic

Thesis background:	The aim of this study is to contribute to the diagnosis of epilepsy by taking advantage of the engineering.
Thesis objective:	The aim of this study is to diagnose epileptic seizures by using machine learning algorithms in Hadoop Environment
Literature:	<p>Andrzejak RG, Lehnertz K, Rieke C, Mormann F, David P, Elger CE (2001) Indications of nonlinear deterministic and finite dimensional structures in time series of brain electrical activity: Dependence on recording region and brain state, Phys. Rev. E, 64, 061907</p> <p>Enamul Kabir, Siuly, and Yanchun Zhang, Epileptic seizure detection from EEG signals using logistic model trees, Brain Inform. 2016 Jun; 3(2): 93–100</p>

	FORM FOR PROPOSING A TOPIC IN THE SECOND CYCLE OF STUDIES	Oznaka	SAO-FENS.4.24.0-ENG
		Datum usvajanja	05.03.2019
		Datum/Br. revizije	-
		Stranica	1/1

Department	Information Technologies
Master thesis title:	Brain Disease Prediction using ML methods in Hadoop
Mentor/professor - contact:	Samed Jukic

Thesis background:	With big data growth in biomedical and healthcare communities, accurate analysis of medical data benefits early disease detection, patient care and community services. However, the analysis accuracy is reduced when the quality of medical data is incomplete
Thesis objective:	The aim of this study is to streamline machine learning algorithms for effective prediction of chronic disease outbreak in disease-frequent communities by using machine learning algorithms in Hadoop Environment
Literature:	<p>P. Groves, B. Kayyali, D. Knott, and S. V. Kuiken, "The 'big data' revolution in healthcare: Accelerating value and innovation," 2016.</p> <p>M. Chen, S. Mao, and Y. Liu, "Big data: A survey," <i>Mobile Networks and Applications</i>, vol. 19, no. 2, pp. 171–209, 2014.</p> <p>P. B. Jensen, L. J. Jensen, and S. Brunak, "Mining electronic health records: towards better research applications and clinical care," <i>Nature Reviews Genetics</i>, vol. 13, no. 6, pp. 395–405, 2012</p> <p><i>Disease Prediction by Machine Learning Over Big Data From Healthcare Communities</i>. Available from: https://www.researchgate.net/publication/316496634_Disease_Prediction_by_Machine_Learning_Over_Big_Data_From_Healthcare_Communities</p>