

Name : N.R.Sakthivel  
Designation : Senior Assistant Professor  
Department : Mechanical Engineering  
Organization/Institution : Amirtha School of Engineering  
Place & Pincode : Coimbatore -641112  
Mobile : 9442789817  
E-Mail: nr\_sakthivel@cb.amritha.edu

Multi component fault diagnosis of rotational mechanical system based on decision tree and support vector machine

M Saimurugan, KI Ramachandran, V Sugumaran, NR Sakthivel  
Expert Systems with Applications 38 (4), 3819-3826

- ☐ Comparison of decision tree-fuzzy and rough set-fuzzy methods for fault categorization of mono-block centrifugal pump  
NR Sakthivel, V Sugumaran, BB Nair  
Mechanical systems and signal processing 24 (6), 1887-1906
- ☐ Evaluation of expert system for condition monitoring of a single point cutting tool using principle component analysis and decision tree algorithm  
M Elangovan, SB Devasenapati, NR Sakthivel, KI Ramachandran  
Expert Systems with Applications 38 (4), 4450-4459
- ☐ A decision tree—rough set hybrid system for stock market trend prediction  
BB Nair, VP Mohandas, NR Sakthivel  
International Journal of Computer Applications 6 (9), 1-6
- ☐ Soft computing approach to fault diagnosis of centrifugal pump  
NR Sakthivel, BB Nair, V Sugumaran  
Applied Soft Computing 12 (5), 1574-1581
- ☐ Comparison of dimensionality reduction techniques for the fault diagnosis of mono block centrifugal pump using vibration signals  
NR Sakthivel, BB Nair, M Elangovan, V Sugumaran, S Saravanmurugan  
Engineering Science and Technology, an International Journal 17 (1), 30-38
- ☐ Application of support vector machine (SVM) and proximal support vector machine (PSVM) for fault classification of monoblock centrifugal pump  
NR Sakthivel, V Sugumaran, BB Nair  
International Journal of Data Analysis Techniques and Strategies 2 (1), 38-61
- ☐ Automatic rule learning using roughset for fuzzy classifier in fault categorization of mono-block centrifugal pump  
NR Sakthivel, V Sugumaran, BB Nair  
Applied Soft Computing 12 (1), 196-203
- ☐ A genetic algorithm optimized decision tree-SVM based stock market trend prediction system  
BB Nair, VP Mohandas, NR Sakthivel  
International journal on computer science and engineering 2 (9), 2981-2988

- ❑ Clustering stock price time series data to generate stock trading recommendations: An empirical study  
BB Nair, PKS Kumar, NR Sakthivel, U Vipin  
Expert Systems with Applications 70, 20-36
- ❑ Use of histogram features for decision tree-based fault diagnosis of monoblock centrifugal pump  
NR Sakthivel, V Indira, BB Nair, V Sugumaran  
International Journal of Granular Computing, Rough Sets and Intelligent ...
- ❑ Machine Learning Approach to the Prediction of Surface Roughness using Statistical Features of Vibration Signal Acquired in Turning  
VS M. Elangovan, N.R.Sakthivel, S.Saravanamurugan, Binoy.B.Nair  
Procedia Computer Science ( 2015 ) 50, 282 – 288
- ❑ Tool condition monitoring techniques in milling process—A review  
T Mohanraj, S Shankar, R Rajasekar, NR Sakthivel, A Pramanik  
Journal of Materials Research and Technology 9 (1), 1032-1042
- ❑ Application of hybrid adaptive filters for stock market prediction  
BB Nair, VP Mohandas, NR Sakthivel, S Nagendran, A Nareash, ...  
2010 International Conference on Communication and Computational ...
- ❑ Predicting stock market trends using hybrid ant-colony-based data mining algorithms: an empirical validation on the Bombay Stock Exchange  
BB Nair, VP Mohandas, NR Sakthivel  
International Journal of Business Intelligence and Data Mining 6 (4), 362-381
- ❑ Wavelet decomposition and support vector machine for fault diagnosis of monoblock centrifugal pump  
V Muralidharan, V Sugumaran, NR Sakthivel  
International Journal of Data Analysis Techniques and Strategies 3 (2), 159-177
- ❑ Decision support system using artificial immune recognition system for fault classification of centrifugal pump  
NR Sakthivel, BB Nair, V Sugumaran, RS Rai  
International Journal of Data Analysis Techniques and Strategies 3 (1), 66-84
- ❑ Chatter prediction in boring process using machine learning technique  
S Saravanamurugan, S Thiyagu, NR Sakthivel, BB Nair  
International Journal of Manufacturing Research 12 (4), 405-422
- ❑ A method for calculation of optimum data size and bin size of histogram features in fault diagnosis of mono-block centrifugal pump  
V Indira, R Vasanthakumari, NR Sakthivel, V Sugumaran  
Expert Systems with Applications 38 (6), 7708-7717
- ❑ Experimental study of effect of isobutanol in performance, combustion and emission characteristics of CI engine fuelled with cotton seed oil blended diesel  
VM Raj, LRG Subramanian, G Manikandaraja  
Alexandria engineering journal 57 (3), 1369-1378
- ❑ Effect of kernel function in support vector machine for the fault diagnosis of pump  
NR Sakthivel, S Saravanamurugan, BB Nair, M Elangovan, V Sugumaran

- ☐ Binoy. B. Nair, V. Sugumaran  
NR Sakthivel  
Soft computing approach to fault diagnosis of centrifugal pump, Applied Soft ...
- ☐ Application of standalone system and hybrid system for fault diagnosis of centrifugal pump using time domain signals and statistical features  
NR Sakthivel, BB Nair, V Sugumaran, RS Roy  
International Journal of Data Mining, Modelling and Management 4 (1), 74-104
- ☐ Fault Diagnosis of Monoblock Centrifugal Pump Using Stationary Wavelet Features and Bayes Algorithm  
VSNRS V. Muralidharan  
Asian Journal of Science and Applied Technology 3 (2), 1-4
- ☐ Determination of sample size using power analysis and optimum bin size of histogram features  
V Indira, R Vasanthakumari, NR Sakthivel, V Sugumaran  
International Journal of Data Analysis Techniques and Strategies 3 (1), 21-41
- ☐ Machine Learning Approach to Condition Monitoring of an Automotive Radiator Cooling Fan System  
R Meena, BB Nair, NR Sakthivel  
Advances in Electrical and Computer Technologies, 1007-1020
- ☐