



## Pattern Recognition applied in Alcohol and LPG Fuel : Concepts and Methods. Application of Artificial Neural Networks and Fuzzy Inference System.

By Vitor Hirayama

VDM Verlag Jan 2010, 2010. Taschenbuch. Condition: Neu. This item is printed on demand - Print on Demand Neuware - This work shows the results of a robust system developed as an alternative to recognize the quality of alcohol vapor and Liquid Petrol Gas (LPG) heat power in an electric nose. Two methodologies were used to recognize alcohol vapor and LPG patterns. The first approach used a Fuzzy Inference System (FIS) and training algorithms of Artificial Neural Networks (ANN): Backpropagation and Learning Vector Quantization. The second approach consists of develop an LPG heat power recognizing system robust to one-random-sensor-loss. Three systems were used. The first implemented an ANN to recognize data that simulated the failure of a random sensor. This system had 97% of right responses. The second implemented seven ANN s trained with input data subsets, such that six ANN s were trained with a different failure sensor, and the seventh ANN was trained with data of all sensors without failure. This system had 99% of right responses. The third implemented an Ensemble Static Learning Machine with ten parallel ANN s. The results were 97% of right responses. Some ways for hardware implementation of the recognizing system were suggested...



**READ ONLINE**  
[ 6.49 MB ]

### Reviews

*The publication is easy in read through safer to comprehend. It is actually loaded with wisdom and knowledge Its been printed in an extremely simple way and is particularly simply right after i finished reading through this pdf where actually modified me, affect the way i believe.*

-- **Ms. Clementina Cole V**

*This is the very best publication i have got read until now. It is definitely simplified but shocks within the fifty percent of the pdf. You may like how the article writer create this pdf.*

-- **Rosario Durgan**

## See Also



### HBR Guide to Getting the Right Work Done

Ingram Publisher Services Feb 2013, 2013. Taschenbuch. Condition: Neu. Neuware - IS YOUR WORKLOAD SLOWING YOU-AND YOUR CAREER-DOWN Your inbox is overflowing. You're paralyzed because you have too much to do but don't know where to start. Your to-do list never seems...



### Business books (Book Guide) : Peter Principle, Airlines of North America, The Dilbert principle, The Joy of Work, The 33 Strategies of War, The Law of Success, Identifying and Managing Project Risk, Blue

Reference Series Books LLC Mrz 2012, 2012. Taschenbuch. Condition: Neu. Neuware - Source: Wikipedia. Commentary (books not included). Pages: 89. Chapters: Peter Principle, Airlines of North America, The Dilbert principle, The Joy of Work, The 33 Strategies of War, The Law of...



### Pocket Guide to APA Style

Wadsworth Publishing Cengage Learning EMEA Sep 2016, 2016. Taschenbuch. Condition: Neu. Neuware - The POCKET GUIDE TO APA STYLE, 5E is an essential tool for writing research papers across the disciplines. Concise and thorough, the POCKET GUIDE offers straightforward explanations, annotated examples,...



### The Servant King: The Bible's portrait of the Messiah

Regent College Publishing 2003-05, 2003. Condition: New. This item is printed on demand. Brand new book, sourced directly from publisher. Dispatch time is 4-5 working days from our warehouse. Book will be sent in robust, secure packaging to ensure it reaches you...



### Studyguide for Biomaterials: The Intersection of Biology and Materials Science by Temenoff, Johnna S., ISBN 9780130097101 (Paperback)

CRAM101, United States, 2011. Paperback. Condition: New. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Never HIGHLIGHT a Book Again! Includes all testable terms, concepts, persons, places, and events. Cram101 Just the FACTS101 studyguides gives all of the outlines, highlights,...



### Game Theory : A Very Short Introduction

Oxford University Press Nov 2007, 2007. Taschenbuch. Condition: Neu. Neuware - Games are everywhere: Drivers manoeuvring in heavy traffic are playing a driving game. Bargain hunters bidding on eBay are playing an auctioning game. A firm negotiating next year's wage is playing...