

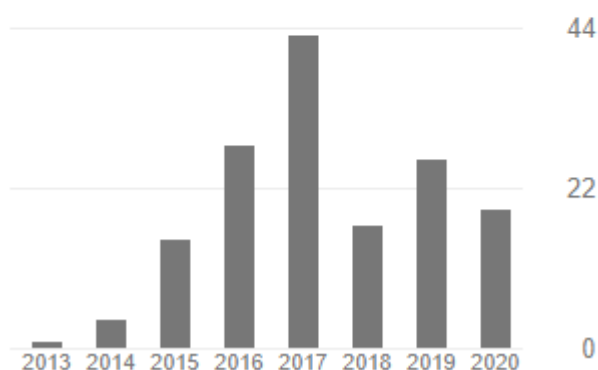
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**Informatics Engineering, an International
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ISSN : 2349 – 2198

<http://airccse.org/journal/iej/index.html>

FACE RECOGNITION: A SURVEY

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ABSTRACT

Face Recognition plays a major role in Biometrics. Feature selection is a measure issue in face recognition. This paper proposes a survey on face recognition. There are many methods to extract face features. In some advanced methods it can be extracted faster in a single scan through the raw image and lie in a lower dimensional space, but still retaining facial information efficiently. The methods which are used to extract features are robust to low-resolution images. The method is a trainable system for selecting face features. After the feature selection procedure next procedure is matching for face recognition. The recognition accuracy is increased by advanced methods.

KEYWORDS

Face features, feature selection, local binary pattern.

For More Details : <http://airccse.org/journal/iej/papers/1113iej05.pdf>

Volume Link : <http://airccse.org/journal/iej/vol1.html>

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CLASS D POWER AMPLIFIER FOR MEDICAL APPLICATION

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ABSTRACT

The objective of this research was to design a 2.4 GHz class AB Power Amplifier (PA), with 0.18um Semiconductor Manufacturing International Corporation (SMIC) CMOS technology by using Cadence software, for health care applications. The ultimate goal for such application is to minimize the trade-offs between performance and cost, and between performance and low power consumption design. This paper introduces the design of a 2.4GHz class D power amplifier which consists of two stage amplifiers. This power amplifier can transmit 15dBm output power to a 50 Ω load. The power added efficiency was 50% and the total power consumption was 90.4 mW. The performance of the power amplifier meets the specification requirements of the desired.

KEYWORDS

Two stage, Class D, Power amplifier, Healthcare

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SECURITY THREATS ON CLOUD COMPUTING VULNERABILITIES

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ABSTRACT

Clouds provide a powerful computing platform that enables individuals and organizations to perform variety levels of tasks such as: use of online storage space, adoption of business applications, development of customized computer software, and creation of a “realistic” network environment. In previous years, the number of people using cloud services has dramatically increased and lots of data has been stored in cloud computing environments. In the meantime, data breaches to cloud services are also increasing every year due to hackers who are always trying to exploit the security vulnerabilities of the architecture of cloud. In this paper, three cloud service models were compared; cloud security risks and threats were investigated based on the nature of the cloud service models. Real world cloud attacks were included to demonstrate the techniques that hackers used against cloud computing systems. In addition, countermeasures to cloud security breaches are presented.

KEYWORDS

Cloud computing, cloud security threats and countermeasures, cloud service models

For More Details : <http://airccse.org/journal/jcsit/5313iicsit06.pdf>

Volume Link : http://airccse.org/journal/iicsit2013_curr.html

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**MODELLING OF NTC THERMISTOR USING ARTIFICIAL
NEURAL NETWORK FOR NONLINEARITY COMPENSATION**

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ABSTRACT

This paper investigates modelling of NTC thermistors using Steinhart-Hart equation for generic model generation and then parsing the same through the linearization algorithm based on Levenberg–Marquart back propagation technique with sigmoid activation function. The entire modelling and scripting of the linearization algorithm has been accomplished in the MATLAB paradigm. The results showcase small linearity error optimal in the chebyshev norms. The reported technique has a potential for linearization of other impedance based non-linear sensors as well. Further work is in progress to integrate the algorithm as a soft IP core in a full custom or semi-custom ASIC wherein thermistors are employed as sensors.

KEYWORDS

ANN, Levenberg–Marquart, Linearization techniques, MATLAB, Thermistors

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Volume Link : <http://airccse.org/journal/iej/vol1.html>

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LOW POWER SI CLASS E POWER AMPLIFIER AND RF SWITCH FOR HEALTH CARE

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ABSTRACT

This research was to design a 2.4 GHz class E Power Amplifier (PA) for health care, with 0.18um Semiconductor Manufacturing International Corporation CMOS technology by using Cadence software. And also RF switch was designed at cadence software with power Jazz 180nm SOI process. The ultimate goal for such application is to reach high performance and low cost, and between high performance and low power consumption design. This paper introduces the design of a 2.4GHz class E power amplifier and RF switch design. PA consists of cascade stage with negative capacitance. This power amplifier can transmit 16dBm output power to a 50Ω load. The performance of the power amplifier and switch meet the specification requirements of the desired.

KEYWORDS

Cascode, Negative Capacitance, Class E, Power amplifier, Healthcare, RF switch

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RESEARCH IN BIG DATA – AN OVERVIEW

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ABSTRACT

Big data is a prominent term which characterizes the improvement and availability of data in all three formats like structure, unstructured and semi formats. Structure data is located in a fixed field of a record or file and it is present in the relational data bases and spreadsheets whereas an unstructured data file includes text and multimedia contents. The primary objective of this big data concept is to describe the extreme volume of data sets i.e. both structured and unstructured. It is further defined with three “V” dimensions namely Volume, Velocity and Variety, and two more “V” also added i.e. Value and Veracity. Volume denotes the size of data, Velocity depends upon the speed of the data processing, Variety is described with the types of the data, Value which derives the business value and Veracity describes about the quality of the data and data understandability. Nowadays, big data has become unique and preferred research areas in the field of computer science. Many open research problems are available in big data and good solutions also been proposed by the researchers even though there is a need for development of many new techniques and algorithms for big data analysis in order to get optimal solutions. In this paper, a detailed study about big data, its basic concepts, history, applications, technique, research issues and tools are discussed.

KEYWORDS:

Big data, Technologies, Visualization, Classification, Clustering

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AN IMPROVED METHOD TO DETECT INTRUSION USING MACHINE LEARNING ALGORITHMS

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ABSTRACT

An intrusion detection system detects various malicious behaviors and abnormal activities that might harm security and trust of computer system. IDS operate either on host or network level via utilizing anomaly detection or misuse detection. Main problem is to correctly detect intruder attack against computer network. The key point of successful detection of intrusion is choice of proper features. To resolve the problems of IDS scheme this research work propose “an improved method to detect intrusion using machine learning algorithms”. In our paper we use KDDCUP 99 dataset to analyze efficiency of intrusion detection with different machine learning algorithms like Bayes, NaiveBayes, J48, J48Graft and Random forest. To identify network based IDS with KDDCUP 99 dataset, experimental results shows that the three algorithms J48, J48Graft and Random forest gives much better results than other machine learning algorithms. We use WEKA to check the accuracy of classified dataset via our proposed method. We have considered all the parameter for computation of result i.e. precision, recall, F – measure and ROC.

KEY WORDS:

IDS, KDDCUP 99, Machine learning, WEKA, Network Security, Precision, Recall

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**THE LEFT AND RIGHT BLOCK POLE PLACEMENT COMPARISON
STUDY: APPLICATION TO FLIGHT DYNAMICS**

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ABSTRACT

It is known that if a linear-time-invariant MIMO system described by a state space equation has a number of states divisible by the number of inputs and it can be transformed to block controller form, we can design a state feedback controller using block pole placement technique by assigning a set of desired Block poles. These may be left or right block poles. The idea is to compare both in terms of system's response.

KEYWORDS

MIMO, Block Controller Form, State Feedback Controller, Block Pole Placement Technique, Left and/or Right Block Poles

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**CLASSIFIER SELECTION MODELS FOR INTRUSION DETECTION
SYSTEM (IDS)**

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ABSTRACT

Any abnormal activity can be assumed to be anomalies intrusion. In the literature several techniques and algorithms have been discussed for anomaly detection. In the most of cases true positive and false positive parameters have been used to compare their performance. However, depending upon the application a wrong true positive or wrong false positive may have severe detrimental effects. This necessitates inclusion of cost sensitive parameters in the performance. Moreover the most common testing dataset KDD-CUP-99 has huge size of data which intern require certain amount of pre-processing. Our work in this paper starts with enumerating the necessity of cost sensitive analysis with some real life examples. After discussing KDD-CUP-99 an approach is proposed for feature elimination and then features selection to reduce the number of more relevant features directly and size of KDD-CUP-99 indirectly. From the reported literature general methods for anomaly detection are selected which perform best for different types of attacks. These different classifiers are clubbed to form an ensemble. A cost opportunistic technique is suggested to allocate the relative weights to classifiers ensemble for generating the final result. The cost sensitivity of true positive and false positive results is done and a method is proposed to select the elements of cost sensitivity metrics for further improving the results to achieve the overall better performance. The impact on performance trade of due to incorporating the cost sensitivity is discussed.

KEYWORDS

Intrusion detection system (IDS), True positive (TP), False Positive (FP), Support Vector Machine (SVM).

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CITATION COUNT – 8

LOW COST PAGE QUALITY FACTORS TO DETECT WEB SPAM

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ABSTRACT

Web spam is a big challenge for quality of search engine results. It is very important for search engines to detect web spam accurately. In this paper we present 32 low cost quality factors to classify spam and ham pages on real time basis. These features can be divided in to three categories: (i) URL features, (ii) Content features, and (iii) Link features. We developed a classifier using Resilient Back-propagation learning algorithm of neural network and obtained good accuracy. This classifier can be applied to search engine results on real time because calculation of these features require very little CPU resources

KEYWORDS

Web Spam, Search Engine, Web Spam Detection, Spam Classifier, Neural Network

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