LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : PROSIDING

Judul Karya Ilmiah	:	Evaluation of skew-planar antenna for UAV communication at 2.4 GHz band		
Jumlah Penulis	:	6 Orang		
Status Pengusul	:	Penulis ke-5		
Identitas Prosiding	:	a. Judul Prosiding	:	IAES International Conference on Electrical Engineering, Computer Science and Informatics
		b. ISBN/ISSN	:	Online ISSN: 1757-899X
		c. Thn Terbit, Tempat Pelaks.	:	2016, Semarang, Indonesia
		d. Penerbit/Organiser	:	IOP Publishing Ltd
		e. Alamat Repository/Web	:	https://iopscience.iop.org/article/10.1088/1757-899X/190/1/012020
		Alamat Artikel	:	https://iopscience.iop.org/article/10.1088/1757-899X/190/1/012020/pdf
		f. Terindeks di (jika ada)	:	Scopus

Kategori Publikasi Makalah (beri ✓pada kategori yang tepat) : [√] *Prosiding* Forum Ilmiah Internasional
[ ] *Prosiding* Forum Ilmiah Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Reviewer		Nilai Rata-rata
	Reviewer I	Reviewer II	
a. Kelengkapan unsur isi prosiding (10%)	2,70	2,50	2,60
b. Ruang lingkup dan kedalaman pembahasan (30%)	8,50	8,50	8,50
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	8,80	8,80	8,80
d. Kelengkapan unsur dan kualitas terbitan/prosiding(30%)	8,80	8,75	8,77
Total = (100%)	**28,80**	**28,55**	**28,67**
Nilai Pengusul = (40% x 28,67)/5= 2,29			

Semarang,

Reviewer 2

Dr. Iwan Setiawan, S.T., M.T.
NIP. 197309262000121001
Unit Kerja : Teknik Elektro FT UNDIP

Reviewer 1

Dr. Wahyudi, S.T., M.T.
NIP. 196906121994031001
Unit Kerja : Teknik Elektro FT UNDIP

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Kategori Publikasi Makalah (beri ✓pada kategori yang tepat) : [√] *Prosiding* Forum Ilmiah Internasional
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Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional ☐	Nasional ☐	
a. Kelengkapan unsur isi prosiding (10%)	3,00		2,70
b. Ruang lingkup dan kedalaman pembahasan (30%)	9,00		8,50
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9,00		8,80
d. Kelengkapan unsur dan kualitas terbitan/prosiding(30%)	9,00		8,80
Total = (100%)	**30,00**		**28,80**
Nilai Pengusul = (40% x 28,80)/5= 2,30			

Catatan Penilaian Paper oleh Reviewer :

1. **Kesesuaian dan kelengkapan unsur isi paper:** *Isi paper cukup baik dan memenuhi standar kualifikasi untuk publikasi internasional.*
2. **Ruang lingkup dan kedalaman pembahasan:** *Lingkup jurnal luas, pembahasan paper cukup detail.*
3. **Kecukupan dan kemutakhiran data/informasi dan metodologi:** *Referensi mutakhir, metode bukan novelty, aplikasi pengembangan.*
4. **Kelengkapan unsur dan kualitas terbitan:** *Kualitas terbitan baik (terindex Scopus Q4).*

Semarang,

Reviewer 1

Dr. Wahyudi, S.T., M.T.
NIP. 196906121994031001
Unit Kerja : Teknik Elektro FT UNDIP

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Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional ☐	Nasional ☐	
a. Kelengkapan unsur isi prosiding (10%)	3,00		2,50
b. Ruang lingkup dan kedalaman pembahasan (30%)	9,00		8,50
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9,00		8,80
d. Kelengkapan unsur dan kualitas terbitan/prosiding(30%)	9,00		8,75
Total = (100%)	**30,00**		**28,55**
Nilai Pengusul = (40% x 28,55)/5= 2,28			

Catatan Penilaian Paper ~~oleh~~ Reviewer :

1. **Kesesuaian dan kelengkapan unsur isi paper:** *Isi paper cukup baik dan merupakan hasil eksperimen yang lengkap.*
2. **Ruang lingkup dan kedalaman pembahasan:** *Lingkup jurnal cukup luas, pembahasan paper kurang detail.*
3. **Kecukupan dan kemutakhiran data/informasi dan metodologi:** *Referensi mutakhir, metode dan aplikasi bukan novelty.*
4. **Kelengkapan unsur dan kualitas terbitan:** *Kualitas terbitan baik, terindex Scopus tapi tidak ada versi printed.*

Semarang,

Reviewer 2

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Volume 190, Issue 1, 19 April 2017, Article number 012020
3rd IAES International Conference on Electrical Engineering, Computer Science and Informatics, EECSI 2016; Semarang; Indonesia; 23 November 2016 through 25 November 2016; Code 127356

Evaluation of skew-planar antenna for UAV communication at 2.4 GHz band

(Conference Paper) (Open Access)

Prakoso, T. ✉, Yaqin, A.A., Ibrahim, Santoso, I., Triwiyatno, A. , Riyadi, M.A.

Department of Electrical Engineering, Faculty of Engineering, Universitas Diponegoro, Semarang, 50275, Indonesia

Abstract

View references (5)

Skew-planar antenna is suitable for unmanned aerial vehicles (UAVs) since it has circular polarization (avoiding polarization-mismatched), omnidirectional radiation pattern (low pointing loss) thus comply with maneuver angles of UAV, and also small size. Investigation with electromagnetic simulations shows that tilt angle and coaxial length are the most sensitive parameters. Modified design with 55° tilt angle (original design: 45°) and 100 mm coaxial length (original: 60 mm) potentially provides wider bandwidth (400 MHz vs. 290 MHz), better impedance-matched ($|S_{11}|$: -47.1 dB vs. -13.6 dB), and better gain (1.98 dBi vs 1.61 dBi). The antenna is predicted capable to support service distance of 3 km in 2.4 GHz band if used with communication module with 18 dBm transmit power and -100 dBm receiver sensitivity. Therefore, the modified antenna is suitable to be applied in UAV. © Published under licence by IOP Publishing Ltd.

SciVal Topic Prominence

Topic: Microwave antennas | Antennas | Dual-polarized antenna

Prominence percentile: 95.910

Chemistry database information

Substances

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Indexed keywords

Engineering controlled terms: Microwave antennas, Omnidirectional antennas, Polarization, Unmanned aerial vehicles (UAV)

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IOP Conf. Series: Materials Science and Engineering **190** (2017) 012010 doi:10.1088/1757-899X/190/1/012010

Cooperative Learning for Distributed In-Network Traffic Classification

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Abstract. Inspired by the concept of autonomic distributed/decentralized network management schemes, we consider the issue of information exchange among distributed network nodes to network performance and promote scalability for in-network monitoring. In this paper, we propose a cooperative learning algorithm for propagation and synchronization of network information among autonomic distributed network nodes for online traffic classification. The results show that network nodes with sharing capability perform better with a higher average accuracy of 89.21% (sharing data) and 88.37% (sharing clusters) compared to 88.06% for nodes without cooperative learning capability. The overall performance indicates that cooperative learning is promising for distributed in-network traffic classification.

1. Introduction

Network traffic classification is a crucial network processing task for network traffic management. Traffic measurement and classification enable network administrators to be aware of the current network state. Data stream mining algorithms [1, 2] have been explored recently for online traffic classification to overcome the shortcoming of conventional data mining algorithms. They are designed to cope with concept drift, adapt to new knowledge and react to changes promptly.

Recently, distributed network management (DNM) strategies such as [3], have been introduced as a solution to the increasing management complexity of communication networks. These strategies are autonomic and decentralized in nature, towards improving network performance, scalability and to reduce human participation. Each DNM entity participates in a distributed management process, which requires cooperation among DNM entities to monitor, analyze and make decision to achieve global network objectives. Cooperative Learning (CL) enables network nodes to discover each other, exchange information, disseminate local decision, enhance self-adaptation of nodes, improve scalability and finally enforce management decision [4].

This paper proposes an analysis for online distributed in-network traffic classification based on our CL framework in [5], using incremental k-means network traffic classification [1]. This paper analyzes the effect of information exchange among nodes on the overall classification accuracy. We tested our proposed method on two schemes: sharing of training labeled data in the form of information and sharing of clusters in the form of knowledge. Our proposed system has been applied

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Noise Reduction in Breath Sound Files Using Wavelet Transform Based Filter

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Abstract. The development of science and technology in the field of healthcare increasingly provides convenience in diagnosing respiratory system problem. Recording the breath sounds is one example of these developments. Breath sounds are recorded using a digital stethoscope, and then stored in a file with sound format. This breath sounds will be analyzed by health practitioners to diagnose the symptoms of disease or illness. However, the breath sounds is not free from interference signals. Therefore, noise filter or signal interference reduction system is required so that breath sounds component which contains information signal can be clarified. In this study, we designed a filter called a wavelet transform based filter. The filter that is designed in this study is using Daubechies wavelet with four wavelet transform coefficients. Based on the testing of the ten types of breath sounds data, the data is obtained in the largest SNRdB bronchial for 74.3685 decibels.

1. Introduction

To make diagnosis of a human respiratory system, health practitioner or doctor uses a device called a stethoscope. With it, medical practitioners can hear the sound of the lungs to diagnose a person's physical condition and health. Breath sounds heard through the stethoscope, is still mixed with other noises like the sound of the heart, skin friction with the stethoscope, and chest movements. It is difficult for health practitioners to diagnose a person's physical condition and health. In signal processing, other voices or extraneous noise is commonly called signal interference or noise.

The development of science and technology in the field of healthcare increasingly provide convenience in diagnosing respiratory system problem. Breath sounds recording is one example of these developments. Breath Sounds are recorded using a digital stethoscope, and then stored in a file with sound format. As with conventional methods, respiratory sounds are not free from interference signals. Therefore, filter noise or signal interference reduction is required so that breath sounds components that contain information signal can be clarified. Research on reducing signal interference had been done since the last few years, but has not been able to give a satisfying result.

Previous studies related to respiratory noise filter, including the separation of heart and lung sounds from the breath sounds with modified spectro-temporal representation [1], and reduction of heart sounds from lung sounds recordings using adaptive filter [2] have been carried out.

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Fast Learning for Big Data Using Dynamic Function

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Abstract. This paper discusses an approach for fast learning in big data. The proposed approach combines momentum factor and training rate, where the momentum is a dynamic function of the training rate in order to avoid overshoot weight to speed up training time of the back propagation neural network engine. The two factors are adjusted dinamically to assure the fast convergence of the training process. Experiments on 2-bit XOR parity problem were conducted using Matlab and a sigmoid function. Experiments results show that the proposed approach signifcantly performs better compare to the standard back propagation neural network in terms of training time. Both, the maximum training time and the minimum training time are significantly faster than the standard algorithm at error threshold of 10^{-5}.

1. Introduction

Recently, we are entering the era of "big-data", and as the development of high-speed signal processing, fast and efficient learning and signal representation is becoming an emergent research topic. Extreme learning machine (ELM) [1] is one of the leading trends for fast learning. Unlike the other traditional learning algorithms, for example, Back Propagation-based neural networks, or support vector machine (SVM)], the parameters of hidden layers of ELM are randomly established and need not be tuned, thus the training of hidden nodes can be established before the inputs are acquired.

Feedforward neural networks have been widely used in various areas of machine learning. Hidden nodes in a neural network architecture work as universal approximation provided that all the parameters of the networks are adjustable. The most representative training method for Artificial Neural Networks is back propagation (BP) algorithm. BP calculates the gradient of a loss function with respect to all the weights in the network and updates the weights for minimizing the loss function. Nevertheless, the parameter tuning of BP-based neural networks is usually time consuming and cannot handle the overfitting problem.

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Optimizing Subgroups Formation for E-MBMS Transmissions in LTE Networks

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Abstract. Long Term Evolution (LTE) network provides a high throughput with low latency which make it suitable for multicast and broadcast services. In Conventional Multicast Scheme (CMS), data is transmitted according to the user with worst channel condition which results in wasting network resources. To overcome the drawback of CMS, a new subgrouping mechanism is proposed to split the multicast group into several subgroups based on users channel quality. The performance of the proposed mechanism has been evaluated using LTE simulator. The simulation results show that the proposed mechanism increase the multicast performance compared to CMS in term of goodput and spectrum efficiency, while maintain fairness index of users in an acceptable level.

Keywords: E-MBMS, Modulation and Coding Schema, multirate, multicast

1. Introduction

Long Term Evolution (LTE) network was introduced by the Third-Generation Partnership Project (3GPP) and was considered as the latest step towards the 4th generation of radio technologies. LTE offers a high throughput with low latency which make it the best choice for Multimedia Service. LTE network exploits the benefits of Orthogonal Frequency Division Multiple Access (OFDMA), in which various users data is multiplexed in frequency and time domains [1]. In OFDMA, the full frequency bandwidth is divided into orthogonal subcarriers, where each subcarrier is allocated 15 kHz. The LTE frame consists of 12 consecutive subcarriers and 10ms duration. Each frame consists of 10 subframes; each subframe is 1ms, which is equal to the Transmission Time Interval (TTI); and then each subframe is equal to two time slots, where each slot is 0.5ms in the time domain and 12 subcarriers in the frequency domain. However, each slot is composed of a resource block (RB), which is the minimal radio resource allocation unit in the LTE. Each RB consists of seven symbols when the normal Cycle Prefix (CP) is used or six symbols when the extended CP is used, as used in E-MBMS subframe [1].

Recently, mobile devices are equipped with large screen with high resolution which requires high data rate for video and has the ability to transmit and received data with higher bit rate. In addition, the

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Organization Readiness and ERP Implementation in Albaha University

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Abstract. This work studies the correlation between the organizational readiness in Albaha University and the respective Critical Success Factors with regards to the Enterprise Resource Planning (ERP) implementation. The study also considers some suggestions to improve the ABU's ERP systems and roadmap towards the self –development strategy and to reduce vendor-dependency. A survey regarding ERP to the end-users, experts and developers in Albaha University was conducted. The analysis of the results in this work confirmed with the results of an existing work. The four significance success factors: Project Management, Business Process Re-engineering, System Integration, and Training and Education are recommended to be adopted to assure the smooth adoption of ERP at Albaha University.

Keywords: ERP, ORGD, Project Management, BPR System Integration

1. Introduction

Weiner [1] defines Organizational readiness (ORGD) for change as "a multi-level, multi-faceted construct. As an organization-level construct, readiness for change refers to organizational members' shared resolve to implement a change (change commitment) and shared belief in their collective capability to do so (change efficacy). The higher the organizational readiness for change, the more organizational members likely to initiate change, exert greater effort, exhibit greater persistence, and display more cooperative behaviour". Figure 1 illustrates the factors and consequences of ORGD for change.

On the other hand, Enterprise Resource Planning (ERP) is the use of software suites to pull together and systemize data of various organization's levels to provide jugdement into key performance indicators (KPIs). The ERP has wide-ranging set of achievements which assists an organization in dealing its business. In general deployment, ERP has to be integrated with other software systems with the aim of optimizing the overall system. Thus, deployment of a new in-house ERP system can involve sizeable business process reengineering and employee retraining.