



D.N.R. COLLEGE OF ENGINEERING & TECHNOLOGY

Balusumudi, Bhimavaram-534202

Academic Year 2018-19

Number of Research Papers Published per Teacher in the Journals Notified on UGC Care List

Sl. No.	Name of the Faculty Author	Title of the Paper	Name of the Journal	ISBN / ISSN Number	Volume / Month	URL / DOI
1.	Dr. Buddharaju Venkata Subrahmanya Varma	An Active Detection Based Security & Trust Routing Scheme in Wireless Sensor Networks	Journal of applied science and computations	1076-5131	5 / December	http://www.j-asc.com/gallery/117-december-2018.pdf
2.	Mr. D D D Suri Babu	An Active Detection Based Security & Trust Routing Scheme in Wireless Sensor Networks	Journal of applied science and computations	1076-5131	5 / December	http://www.j-asc.com/gallery/117-december-2018.pdf
3.		A survey on Semantic-Enhanced Marginalized Denoising Auto-Encoder	JETIR	2349-5162	5 / June	https://www.jetir.org/papers/JETIR1806591.pdf
4.	Dr. A. Ramamurthy	Efficient System Performance for Data Replication in Cloud Computing	IJEAT	2249-8958	8 / February	https://www.ijeat.org/wp-content/uploads/papers/v8i3/C5979028319.pdf
5.	B Nanadana Kumar	A Novel performance of Supervised attribute clustering of dimensionality reduction in irrelevant data	IJMERT	2348-8565	5 / November	https://www.jetir.org/view?paper=JETIR1811070
6.	Mr. L Bujji Babu	A Novel performance of Supervised attribute clustering of dimensionality reduction in irrelevant data	IJMERT	2348-8565	5 / November	https://www.jetir.org/view?paper=JETIR1811070
7.	Mr. Karinki Surya Ram Prasad	A Novel performance of Supervised attribute clustering of dimensionality reduction in irrelevant data	IJMERT	2348-8565	5 / November	https://www.jetir.org/view?paper=JETIR1811070
8.	Abdul Ahad	A survey on Semantic-Enhanced Marginalized Denoising Auto-Encoder	JETIR	2349-5162	5 / June	https://www.jetir.org/papers/JETIR1806591.pdf
9.	Dr. K. Rajesh	Large Amplitude Free Vibration Analysis Of Tapered Timoshenko Beams Using Coupled Displacement Field Method	Int. J. of Applied Mechanics and Engineering	2353-9003	23 / December	https://www.researchgate.net/publication/327158313
10.	Dr. S. Koteswari	IOT based smart garbage and waste gathering Bin	JETIR	2349-5162	6 / May	https://www.jetir.org/papers/JETIR1905722.pdf
11.		Mechanized Object Detection Algorithm for Urban Surveillance System in Smart Cities Using Internet of Things	IJRAR	2349-5138	5 / December	http://ijrar.com/upload_issue/ijrar_issue_20542566.pdf
12.		Emerging trends in Nanotechnology in financial fraud protection for ATM/Smart Cards	IJSRR	2279-0543	7/ October	https://www.ijsrr.org/pdf/1476.pdf

An Active Detection Based Security & Trust Routing Scheme in Wireless Sensor Networks

K.Geetha Devi¹, Dr.B.V.S VARMA², DDD SURIBABU³

¹PG Scholar In Department of CSE DNR College of Engineering & Technology ,Bhimavaram ,A.P
kanurugeetha@gmail.com

² Professor. In Department of CSE DNR College of Engineering & Technology ,Bhimavaram ,A.P
phdvarma@gmail.com

³HEAD & Assoc.Prof In Department of CSE DNR College of Engineering & Technology ,Bhimavaram ,A.P
dnr.csehod@gmail.com

Abstract— Wireless sensor networks (WSNs) are increasingly being deployed in security-critical applications. Because of their inherent resource-constrained characteristics, they are prone to various security attacks, and a black hole attack is a type of attack that seriously affects data collection. To conquer that challenge, an active detection-based security and trust routing scheme named ActiveTrust is proposed for WSNs. The most important innovation of ActiveTrust is that it avoids black holes through the active creation of a number of detection routes to quickly detect and obtain nodal trust and thus improve the data route security. More importantly, the generation and distribution of detection routes are given in the ActiveTrust scheme, which can fully use the energy in non-hotspots to create as many detection routes as needed to achieve the desired security and energy efficiency. Both comprehensive theoretical analysis and experimental results indicate that the performance of the ActiveTrust scheme is better than that of previous studies. ActiveTrust can significantly improve the data route success probability and ability against black hole attacks and can optimize network lifetime.

Keywords:—black hole attack, network lifetime, security, trust, wireless sensor networks

I. INTRODUCTION

WIRELESS Sensor Networks (WSNs) are emerging as a promising technology because of their wide range of applications in industrial, environmental monitoring, military and civilian domains. Due to economic considerations, the nodes are usually simple and low cost. They are often unattended, however, and are hence likely to suffer from different types of novel attacks. A black hole attack (BLA) is one of the most typical attacks and works as The ActiveTrust scheme is the first routing scheme that uses active detection routing to address BLA.

The most significant difference between ActiveTrust and previous research is that we create multiple detection routes in regions with residue energy; because the attacker is not aware of detection routes, it will attack these routes and, in so doing, be exposed. In this way, the attacker's behavior and location, as well as nodal trust, can be obtained and used to avoid black holes when processing real data routes. To the best of our knowledge, this is the first proposed active detection mechanism in

WSNs. (2) The ActiveTrust route protocol has better energy efficiency.

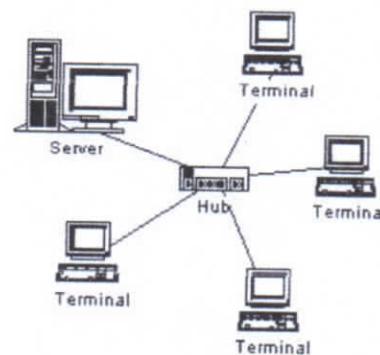


Figure:Basic networks terms.

Energy is very precious in WSNs, and there will be more energy consumption if active detection is processed. Therefore, in previous research, it was impossible to imagine adopting such gh-energy-consumption actives.

However, we find it possible after carefully analyzing the energy consumption in WSNs. Research has noted that there is still up to 90% residue energy in WSNs when the network has died due to the "energy hole" phenomenon. Therefore, the ActiveTrust scheme takes full advantage of the residue energy to create detection routes and attempts to decrease energy consumption in hotspots (to improve network lifetime). Those detection routes can detect the nodal trust without decreasing lifetime and thus improve the network security. According to theoretical analysis and experimental results, the energy efficiency of the ActiveTrust scheme is improved more than 2 times compared to previous routing schemes, including shortest routing, multi-path routing. The Active Trust scheme has better security performance. Compared with previous research, nodal trust can be obtained in Active Trust. The route is created by the following principle. First, choose nodes with high trust to avoid

An Active Detection Based Security & Trust Routing Scheme in Wireless Sensor Networks

K.Geetha Devi¹, Dr.B.V.S VARMA², DDD SURIBABU³

¹PG Scholar In Department of CSE DNR College of Engineering & Technology ,Bhimavaram ,A.P
kanurugeetha@gmail.com

² Professor. In Department of CSE DNR College of Engineering & Technology ,Bhimavaram ,A.P
phdvarma@gmail.com

³HEAD & Assoc.Prof In Department of CSE DNR College of Engineering & Technology ,Bhimavaram ,A.P
dnr.csehod@gmail.com

Abstract— Wireless sensor networks (WSNs) are increasingly being deployed in security-critical applications. Because of their inherent resource-constrained characteristics, they are prone to various security attacks, and a black hole attack is a type of attack that seriously affects data collection. To conquer that challenge, an active detection-based security and trust routing scheme named ActiveTrust is proposed for WSNs. The most important innovation of ActiveTrust is that it avoids black holes through the active creation of a number of detection routes to quickly detect and obtain nodal trust and thus improve the data route security. More importantly, the generation and distribution of detection routes are given in the ActiveTrust scheme, which can fully use the energy in non-hotspots to create as many detection routes as needed to achieve the desired security and energy efficiency. Both comprehensive theoretical analysis and experimental results indicate that the performance of the ActiveTrust scheme is better than that of previous studies. ActiveTrust can significantly improve the data route success probability and ability against black hole attacks and can optimize network lifetime.

Keywords:—black hole attack, network lifetime, security, trust, wireless sensor networks

I. INTRODUCTION

WIRELESS Sensor Networks (WSNs) are emerging as a promising technology because of their wide range of applications in industrial, environmental monitoring, military and civilian domains. Due to economic considerations, the nodes are usually simple and low cost. They are often unattended, however, and are hence likely to suffer from different types of novel attacks. A black hole attack (BLA) is one of the most typical attacks and works as The ActiveTrust scheme is the first routing scheme that uses active detection routing to address BLA.

The most significant difference between ActiveTrust and previous research is that we create multiple detection routes in regions with residue energy; because the attacker is not aware of detection routes, it will attack these routes and, in so doing, be exposed. In this way, the attacker's behavior and location, as well as nodal trust, can be obtained and used to avoid black holes when processing real data routes. To the best of our knowledge, this is the first proposed active detection mechanism in

WSNs. (2) The ActiveTrust route protocol has better energy efficiency.

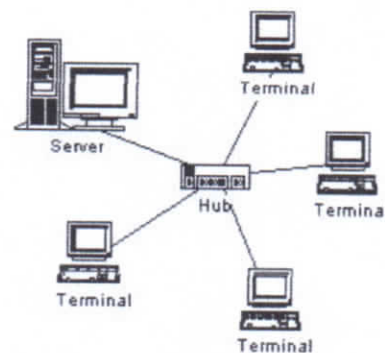


Figure:Basic networks terms.

Energy is very precious in WSNs, and there will be more energy consumption if active detection is processed. Therefore, in previous research, it was impossible to imagine adopting such gh-energy-consumption actives.

However, we find it possible after carefully analyzing the energy consumption in WSNs. Research has noted that there is still up to 90% residue energy in WSNs when the network has died due to the "energy hole" phenomenon. Therefore, the ActiveTrust scheme takes full advantage of the residue energy to create detection routes and attempts to decrease energy consumption in hotspots (to improve network lifetime). Those detection routes can detect the nodal trust without decreasing lifetime and thus improve the network security. According to theoretical analysis and experimental results, the energy efficiency of the ActiveTrust scheme is improved more than 2 times compared to previous routing schemes, including shortest routing, multi-path routing. The Active Trust scheme has better security performance. Compared with previous research, nodal trust can be obtained in Active Trust. The route is created by the following principle. First, choose nodes with high trust to avoid

A survey on Semantic-Enhanced Marginalized Denoising Auto-Encoder

S MANIKANTA¹, ABDUL AHAD², DDD SURIBABU³

¹PG Scholar In Department of CSE DNR College of Engineering & Technology ,Bhimavaram ,A.P

² Assoc. Prof. In Department of CSE DNR College of Engineering & Technology ,Bhimavaram ,A.P

³HEAD & Assoc.Prof In Department of CSE DNR College of Engineering & Technology ,Bhimavaram ,A.P

Abstract—As a side effect of increasingly popular social media, cyberbullying has emerged as a serious problem afflicting children, adolescents and young adults. Machine learning techniques make automatic detection of bullying messages in social media possible, and this could help to construct a healthy and safe social media environment. In this meaningful research area, one critical issue is robust and discriminative numerical representation learning of text messages. In this paper, we propose a new representation learning method to tackle this problem. Our method named Semantic-Enhanced Marginalized Denoising Auto-Encoder (smSDA) is developed via semantic extension of the popular deep learning model stacked denoising autoencoder. The semantic extension consists of semantic dropout noise and sparsity constraints, where the semantic dropout noise is designed based on domain knowledge and the word embedding technique. Our proposed method is able to exploit the hidden feature structure of bullying information and learn a robust and discriminative representation of text. Comprehensive experiments on two public cyberbullying corpora (Twitter and MySpace) are conducted, and the results show that our proposed approaches outperform other baseline text representation learning methods.

Keywords—Cyberbullying Detection, Text Mining, Representation Learning, Stacked Denoising Autoencoders

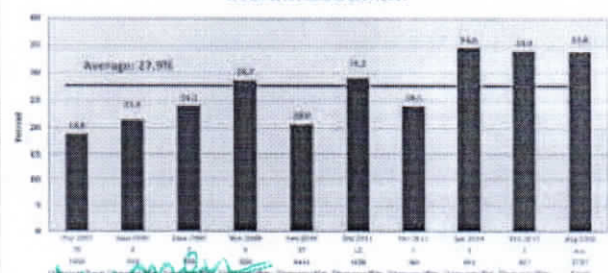
I. INTRODUCTION

Cyberbullying can be defined as aggressive, intentional actions performed by an individual or a group of people via digital communication methods such as sending messages and posting comments against a victim. Different from traditional bullying that usually occurs at school during face-to-face communication, cyberbullying, cyberbullying victimization rate ranges from 10% to 40%. In the United States, approximately 43% of teenagers were ever bullied on social media. The same as traditional bullying, cyberbullying has negative, insidious and sweeping impacts on children. The outcomes for victims under cyberbullying may even be tragic such as the occurrence of self-injurious behaviour or suicides. One way to address the cyberbullying problem is to automatically detect and promptly report bullying messages so that proper measures can be taken to prevent possible tragedies.

In the text-based cyberbullying detection, the first and also critical step is the numerical representation learning for text messages. In fact, representation learning of text is extensively studied in text mining, information retrieval and natural language processing (NLP). Bag-of-words (BoW) model is one commonly used model that each dimension corresponds to a term. Latent Semantic Analysis (LSA) and topic models are another popular text representation models,

Therefore, the useful representation should discover the meaning behind text units. In cyberbullying detection, the numerical representation for Internet messages should be robust and discriminative. Since messages on social media are often very short and contain a lot of informal language and misspellings, robust representations for these messages are required to reduce their ambiguity. Even worse, the lack of sufficient high-quality training data, i.e., data sparsity make the issue more challenging. Firstly, labeling data is labor intensive and time consuming. Secondly, cyberbullying is hard to describe and judge from a third view due to its intrinsic ambiguities. Thirdly, due to protection of Internet users and privacy issues, only a small portion of messages are left on the Internet, and most bullying posts are deleted. As a result, the trained classifier may not generalize well on testing messages that contain nonactivated but discriminative features. The goal of this present study is to develop methods that can learn robust and discriminative representations to tackle the above problems in cyberbullying detection. Some approaches have been proposed to tackle these problems by incorporating expert knowledge into feature learning. Yin et.al proposed to combine BoW features, senti-ment features and contextual features to train a support vector machine for online harassment detection. Dinakar et.al utilized label specific features to extend the general features, where the label specific features are learned by Linear Discriminative Analysis. In addition, common sense knowledge was also applied. Nahar et.al presented a weighted TF-IDF scheme via scaling bullying-like features by a factor of two. Besides content-based information, Maral et.al proposed to apply users' information, such as gender and history messages, and context information as extra features.

Lifetime Cyberbullying Victimization Rates
Ten Different Studies 2007-2016



Efficient System Performance for Data Replication in Cloud Computing

A Ramamurthy, V.Goutham

Abstract: Unlike conventional superior registering condition, for example, group and supercomputers, the cloud processing is a gathering of interconnected and virtualized figuring assets that are figured out how to be one brought together high performance processing power. Be that as it may, the Cloud condition establishes a heterogeneous and a profoundly powerful condition. Dissatisfactions at the server ranches centers are standard as an option because of the broad size of real resources and information. Eventually, the cloud condition requires a gainful adaptable insights replication organization saving in musings the quit goal to advance to the natural ordinary for the Cloud circumstance. on this paper, we prompt a records replication way which adaptively picks the measurements data for replication with a specific surrender reason to decorate the general constancy of the system and to satisfy the ideal incredible of organizations. Likewise, the proposed strategy picks effectively the amount of generations and correspondingly the convincing information center points for replication. The generally realized actualities documents are chosen for replication in perspective of using a lightweight time-course of action procedure, which dismembers the proceeded with case of insights certainties requests, and offers estimates to the future realities demands. Exploratory outcomes uncover that the proposed system continues satisfactorily to improve the enduring pleasant of the Cloud structure underneath examination.

Index Choice: System availability, replication, adaptive, cloud computing

I. INTRODUCTION

Distributed computing is a substantial scale parallel and disseminated registering framework. It includes an aggregation of interconnected besides, virtualized preparing resources that are made sense of how to be one bound together enlisting resources. The gave dynamic, virtual resources, for instance, frameworks, servers, accumulating, applications and data, can be passed on as an organization. Organizations are passed on demand to the end-customers over quick Internet as three sorts of handling configuration, to be specific Programming as a Service (SAAS), Platforms as a Service (PAAS) and Infrastructure as an administration (IAAS). The primary objective is to provide customers progressively versatile corporations direct, greater less costly, flexible, substantially open and memorable enlisting resources[1].The software program as a service (SaaS) designing offers programming applications advocated and

supervised by means of a master affiliation for the quit-consumer superseding secretly run programs with internet groups programs. in the Infrastructure as a Service (IaaS), Service incorporates administration of equipment and programming for preparing, information stockpiling, systems and any required foundation for sending of working frameworks and applications which would typically be required in an information focus overseen by the client. In the Platform as a Service (PaaS), supplier contains programming tongues and mechanical assemblies and an utility transport level encouraged by method for the authority business venture to help advancement and movement of end-buyer programs[2]. at the point when all is said in accomplished, the Cloud Computing offers the item and contraption premise as organizations using gigantic scale insights centers[3]. at last, Cloud figuring moved away the estimation and records accumulating from the stop buyer and onto extensive wide assortment of server ranches establishment. This mitigates clients of the burdens of framework and readiness provisioning and organization. gadget and writing computer programs are passed on to clients as on-ask for advantages over the web. The Cloud structure can scale out the framework potential to fulfill the ideal non-helpful nature of organizations (QoS). be that as it may, it is endeavoring to give high enduring lovely and skilled get admission to the cloud server cultivates in perspective of the far reaching scale and dynamic nature of the Cloud. Replication is the way toward giving different impersonations of a comparable administration at different nodes[4]. Replication is a connected way inside the advanced restrictive fogs structures, for example, GFS (Google report system) and HDFS (Hadoop disseminated report gadget) [5, 6]. in the cloud, records replication is cultivated through records resource pool and the quantity of measurements duplicates is statically set in gentle of records and delight in[7]. additionally, it isn't urgent to make propagation for all measurements records, uniquely for those non a great deal of the time or as of past due used information insights. In this manner, it's miles vital to adaptively mirror the each now and again used realities data, decide the measure of information impersonations and the actualities center points regions wherein to put the new impersonations as shown by methods for the current cloud circumstances. on this paper, we exhort a flexible replication strategy in a cloud area that adaptively adjusts to the ensuing issues:

- What to duplicate to enhance the non-valuable QoS. The select framework is transcendently depends on assessing the historical backdrop of the measurements needs making utilization of a light-weight time-affiliation gauge estimation. using the normal information ask, we can recognize what information archives expect replication to adorn the structure constancy.

Manuscript published on 28 February 2019.

* Correspondence Author (s)

Dr A Ramamurthy, Professor CSE, TKR Engineering College, Hyderabad, Telangana, India.

Dr V.Goutham, Professor CSE, SREYAS institute of Engineering College, Hyderabad, Telangana, India.

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an open access article under the CC-BY-NC-ND license <http://creativecommons.org/licenses/by-nc-nd/4.0/>

A NOVEL PERFORMANCE OF SUPERVISED ATTRIBUTE CLUSTERING OF DIMENSIONALITY REDUCTION IN IRRELEVANT DATA

¹Bujji Babu Lingampalli, ²K.S.R. Prasad, ³E Rama Lakshmi, ⁴B Nandana Kumar

¹Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India.

²Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India, ³Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India. ⁴Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India.

Abstract : Feature subset selection is an effective way for dimensionality reduction, eliminating irrelevant data and redundant data, increasing accuracy. There are various feature subset selection methods in machine learning applications and they are classified into four categories: Embedded, wrapper, filter and hybrid approaches. Embedded approach is more efficient than other three approaches. Example for this approach is traditional machine learning algorithms such as decision trees and neural networks. Wrapper method gives more accuracy in learning algorithms. But here the computational complexity is large. This paper centers on a novel data mining technique we term supervised clustering. Unlike traditional clustering, supervised clustering assumes that the examples are classified. The goal of supervised clustering is to identify class-uniform clusters that have high probability densities. A novel approach called supervised attribute clustering algorithm is proposed to improve the accuracy and check the probability of the patterns. In this method, faster retrieval of relevant data is made more efficient and accurate. By using this method, users can get precise results and negligible data loss. This method displays results based on the high probability density thereby providing privacy for data and reducing the dimensionality of the data.

IndexTerms - Embedded, Wrapper, Clustering, Hybrid, Virginica, Setosa

I. INTRODUCTION

Cluster analysis or clustering is the task of grouping a set of objects in such a way that objects in the same group (called a cluster) are more similar (in some sense or another) to each other than to those in other groups (clusters). It is a main task of exploratory data mining, and a common technique for statistical data analysis, used in many fields, including machine learning, image analysis, information retrieval bio informatics data compression and computer graphics. Generally on the unsupervised learning framework clustering is applied using particular error functions, e.g. an error function that minimizes the distances inside a cluster keeping clusters tight. The difference between Supervised and traditional clustering, is traditional clustering that is applied on classified examples with the objective of identifying clusters that have high probability density with respect to a single class.

The main advantage with supervised clustering, is we also like to keep the number of clusters small, and objects are assigned to clusters using a notion of closeness with respect to a given distance function. Fig. 1 examines the differences between traditional and supervised clustering. Let us consider that the black and white examples in the figure that represent subspecies of Iris plants named Setosa and Virginica, respectively. Here we apply traditional clustering algorithm, that identifies the four clusters depicted in Figure 1.a. If our aim is to generate summaries for the Virginica and Setosa classes of the Iris Plants, the clustering in Figure 1.a would not be very attractive because it joined Setosa and Virginica objects in cluster A whereas it combined the examples of Virginica class in two different clusters B and C.

The proposed supervised clustering algorithm maximizes class purity, as well as, it splits cluster A into two clusters E and F. simultaneously the supervised clustering tries to keep the number of clusters low. Here clusters B and C would be merged into one cluster without compromising class purity where as reducing the number of clusters is the another important feature in this algorithm. Supervised clustering algorithm would finally identifies cluster G with the combination of clusters B and C as shown in Figure 1.b..

H. Nandana Kumar
PRINCIPAL
 DNR College of Engg. & Tech
 BHIMAVARAM, A.P.

A NOVEL PERFORMANCE OF SUPERVISED ATTRIBUTE CLUSTERING OF DIMENSIONALITY REDUCTION IN IRRELEVANT DATA

¹Bujji Babu Lingampalli, ²K.S.R. Prasad, ³E Rama Lakshmi, ⁴B Nandana Kumar

¹Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India.

²Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India, ³Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India. ⁴Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India.

Abstract : Feature subset selection is an effective way for dimensionality reduction, eliminating irrelevant data and redundant data, increasing accuracy. There are various feature subset selection methods in machine learning applications and they are classified into four categories: Embedded, wrapper, filter and hybrid approaches. Embedded approach is more efficient than other three approaches. Example for this approach is traditional machine learning algorithms such as decision trees and neural networks. Wrapper method gives more accuracy in learning algorithms. But here the computational complexity is large. This paper centers on a novel data mining technique we term supervised clustering. Unlike traditional clustering, supervised clustering assumes that the examples are classified. The goal of supervised clustering is to identify class-uniform clusters that have high probability densities. A novel approach called supervised attribute clustering algorithm is proposed to improve the accuracy and check the probability of the patterns. In this method, faster retrieval of relevant data is made more efficient and accurate. By using this method, users can get precise results and negligible data loss. This method displays results based on the high probability density thereby providing privacy for data and reducing the dimensionality of the data.

IndexTerms - Embedded, Wrapper, Clustering, Hybrid, Virginica, Setosa

I. INTRODUCTION

Cluster analysis or clustering is the task of grouping a set of objects in such a way that objects in the same group (called a cluster) are more similar (in some sense or another) to each other than to those in other groups (clusters). It is a main task of exploratory data mining, and a common technique for statistical data analysis, used in many fields, including machine learning, image analysis, information retrieval bio informatics data compression and computer graphics. Generally on the unsupervised learning framework clustering is applied using particular error functions, e.g. an error function that minimizes the distances inside a cluster keeping clusters tight. The difference between Supervised and traditional clustering, is traditional clustering that is applied on classified examples with the objective of identifying clusters that have high probability density with respect to a single class.

The main advantage with supervised clustering, is we also like to keep the number of clusters small, and objects are assigned to clusters using a notion of closeness with respect to a given distance function. Fig. 1 examines the differences between traditional and supervised clustering. Let us consider that the black and white examples in the figure that represent subspecies of Iris plants named Setosa and Virginica, respectively. Here we apply traditional clustering algorithm, that identifies the four clusters depicted in Figure 1.a. If our aim is to generate summaries for the Virginica and Setosa classes of the Iris Plants, the clustering in Figure 1.a would not be very attractive because it joined Setosa and Virginica objects in cluster A whereas it combined the examples of Virginica class in two different clusters B and C.

The proposed supervised clustering algorithm maximizes class purity, as well as, it splits cluster A into two clusters E and F. simultaneously the supervised clustering tries to keep the number of clusters low. Here clusters B and C would be merged into one cluster without compromising class purity where as reducing the number of clusters is the another important feature in this algorithm. Supervised clustering algorithm would finally identifies cluster G with the combination of clusters B and C as shown in Figure 1.b..

H. N. Lakshmi
PRINCIPAL
 DNR College of Engg. & Tech
 BHIMAVARAM-534 002.

A NOVEL PERFORMANCE OF SUPERVISED ATTRIBUTE CLUSTERING OF DIMENSIONALITY REDUCTION IN IRRELEVANT DATA

¹Bujji Babu Lingampalli, ²K.S.R. Prasad, ³E Rama Lakshmi, ⁴B Nandana Kumar

¹Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India.

²Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India, ³Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India. ⁴Assistant Professor, Department of CSE, DNR College of Engineering & Technology, Bhimavaram, AP, India.

Abstract : Feature subset selection is an effective way for dimensionality reduction, eliminating irrelevant data and redundant data, increasing accuracy. There are various feature subset selection methods in machine learning applications and they are classified into four categories: Embedded, wrapper, filter and hybrid approaches. Embedded approach is more efficient than other three approaches. Example for this approach is traditional machine learning algorithms such as decision trees and neural networks. Wrapper method gives more accuracy in learning algorithms. But here the computational complexity is large. This paper centers on a novel data mining technique we term supervised clustering. Unlike traditional clustering, supervised clustering assumes that the examples are classified. The goal of supervised clustering is to identify class-uniform clusters that have high probability densities. A novel approach called supervised attribute clustering algorithm is proposed to improve the accuracy and check the probability of the patterns. In this method, faster retrieval of relevant data is made more efficient and accurate. By using this method, users can get precise results and negligible data loss. This method displays results based on the high probability density thereby providing privacy for data and reducing the dimensionality of the data.

IndexTerms - Embedded, Wrapper, Clustering, Hybrid, Virginica, Setosa

I. INTRODUCTION

Cluster analysis or clustering is the task of grouping a set of objects in such a way that objects in the same group (called a cluster) are more similar (in some sense or another) to each other than to those in other groups (clusters). It is a main task of exploratory data mining, and a common technique for statistical data analysis, used in many fields, including machine learning, image analysis, information retrieval bio informatics data compression and computer graphics. Generally on the unsupervised learning framework clustering is applied using particular error functions, e.g. an error function that minimizes the distances inside a cluster keeping clusters tight. The difference between Supervised and traditional clustering, is traditional clustering that is applied on classified examples with the objective of identifying clusters that have high probability density with respect to a single class.

The main advantage with supervised clustering, is we also like to keep the number of clusters small, and objects are assigned to clusters using a notion of closeness with respect to a given distance function. Fig. 1 examines the differences between traditional and supervised clustering. Let us consider that the black and white examples in the figure that represent subspecies of Iris plants named Setosa and Virginica, respectively. Here we apply traditional clustering algorithm, that identifies the four clusters depicted in Figure 1.a. If our aim is to generate summaries for the Virginica and Setosa classes of the Iris Plants, the clustering in Figure 1.a would not be very attractive because it joined Setosa and Virginica objects in cluster A whereas it combined the examples of Virginica class in two different clusters B and C.

The proposed supervised clustering algorithm maximizes class purity, as well as, it splits cluster A into two clusters E and F. simultaneously the supervised clustering tries to keep the number of clusters low. Here clusters B and C would be merged into one cluster without compromising class purity where as reducing the number of clusters is the another important feature in this algorithm. Supervised clustering algorithm would finally identifies cluster G with the combination of clusters B and C as shown in Figure 1.b..

H. Nandana Kumar

PRINCIPAL
DNR College of Engg. & Tech
BHIMAVARAM

A survey on Semantic-Enhanced Marginalized Denoising Auto-Encoder

S MANIKANTA¹, ABDUL AHAD², DDD SURIBABU³

¹PG Scholar In Department of CSE DNR College of Engineering & Technology, Bhimavaram, A.P

² Assoc. Prof. In Department of CSE DNR College of Engineering & Technology, Bhimavaram, A.P

³HEAD & Assoc.Prof In Department of CSE DNR College of Engineering & Technology, Bhimavaram, A.P

Abstract—As a side effect of increasingly popular social media, cyberbullying has emerged as a serious problem afflicting children, adolescents and young adults. Machine learning techniques make automatic detection of bullying messages in social media possible, and this could help to construct a healthy and safe social media environment. In this meaningful research area, one critical issue is robust and discriminative numerical representation learning of text messages. In this paper, we propose a new representation learning method to tackle this problem. Our method named Semantic-Enhanced Marginalized Denoising Auto-Encoder (smSDA) is developed via semantic extension of the popular deep learning model stacked denoising autoencoder. The semantic extension consists of semantic dropout noise and sparsity constraints, where the semantic dropout noise is designed based on domain knowledge and the word embedding technique. Our proposed method is able to exploit the hidden feature structure of bullying information and learn a robust and discriminative representation of text. Comprehensive experiments on two public cyberbullying corpora (Twitter and MySpace) are conducted, and the results show that our proposed approaches outperform other baseline text representation learning methods.

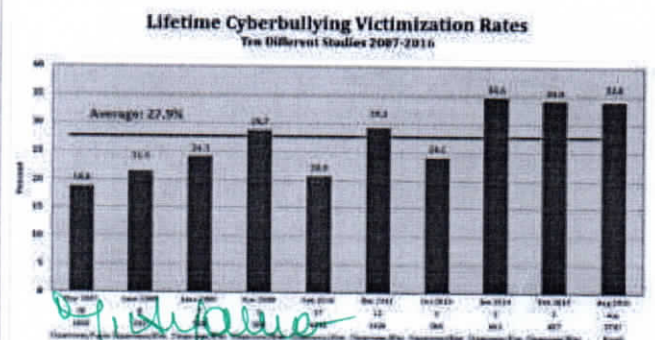
Keywords—Cyberbullying Detection, Text Mining, Representation Learning, Stacked Denoising Autoencoders

I. INTRODUCTION

Cyberbullying can be defined as aggressive, intentional actions performed by an individual or a group of people via digital communication methods such as sending messages and posting comments against a victim. Different from traditional bullying that usually occurs at school during face-to-face communication, cyberbullying, cyberbullying victimization rate ranges from 10% to 40%. In the United States, approximately 43% of teenagers were ever bullied on social media. The same as traditional bullying, cyberbullying has negative, insidious and sweeping impacts on children. The outcomes for victims under cyberbullying may even be tragic such as the occurrence of self-injurious behaviour or suicides. One way to address the cyberbullying problem is to automatically detect and promptly report bullying messages so that proper measures can be taken to prevent possible tragedies.

In the text-based cyberbullying detection, the first and also critical step is the numerical representation learning for text messages. In fact, representation learning of text is extensively studied in text mining, information retrieval and natural language processing (NLP). Bag-of-words (BoW) model is one commonly used model that each dimension corresponds to a term. Latent Semantic Analysis (LSA) and topic models are another popular text representation models,

Therefore, the useful representation should discover the meaning behind text units. In cyberbullying detection, the numerical representation for Internet messages should be robust and discriminative. Since messages on social media are often very short and contain a lot of informal language and misspellings, robust representations for these messages are required to reduce their ambiguity. Even worse, the lack of sufficient high-quality training data, i.e., data sparsity make the issue more challenging. Firstly, labeling data is labor intensive and time consuming. Secondly, cyberbullying is hard to describe and judge from a third view due to its intrinsic ambiguities. Thirdly, due to protection of Internet users and privacy issues, only a small portion of messages are left on the Internet, and most bullying posts are deleted. As a result, the trained classifier may not generalize well on testing messages that contain nonactivated but discriminative features. The goal of this present study is to develop methods that can learn robust and discriminative representations to tackle the above problems in cyberbullying detection. Some approaches have been proposed to tackle these problems by incorporating expert knowledge into feature learning. Yin et.al proposed to combine BoW features, sentiment features and contextual features to train a support vector machine for online harassment detection. Dinakar et.al utilized label specific features to extend the general features, where the label specific features are learned by Linear Discriminative Analysis. In addition, common sense knowledge was also applied. Nahar et.al presented a weighted TF-IDF scheme via scaling bullying-like features by a factor of two. Besides content-based information, Maral et.al proposed to apply users' information, such as gender and history messages, and context information as extra features.



PRINCIPAL
D.N.R. College of Engg. & Tech.
BHIMAVARAM-534 202

LARGE AMPLITUDE FREE VIBRATION ANALYSIS OF TAPERED TIMOSHENKO BEAMS USING COUPLED DISPLACEMENT FIELD METHOD

K. RAJESH* and K.M. SAHEB

Department of Mechanical Engineering, JNTUK

Kakinada, AP, INDIA-533 003

E-mails: krajeshmech1112@gmail.com; meera.aec@gmail.com

Tapered beams are more efficient compared to uniform beams as they provide a better distribution of mass and strength and also meet special functional requirements in many engineering applications. In this paper, the linear and non-linear fundamental frequency parameter values of the tapered Timoshenko beams are evaluated by using the coupled displacement field (CDF) method and closed form expressions are derived in terms of frequency ratio as a function of slenderness ratio, taper ratio and maximum amplitude ratio for hinged-hinged and clamped-clamped beam boundary conditions. The effectiveness of the CDF method is brought out through the solution of the large amplitude free vibrations, in terms of fundamental frequency of tapered Timoshenko beams with axially immovable ends. The results obtained by the present CDF method are validated with the existing literature wherever possible.


Key words: large amplitude vibrations, coupled displacement field method, tapered Timoshenko beams, taper ratio, slenderness ratio, frequency ratio.

1. Introduction

Research on vibrations of beams has been going on for a long period of time. So far, many authors have found different methods to find the free vibration behavior of shear flexible beams. Abrate [1] analyzed the free vibration of non-uniform beams with general shape and arbitrary boundary conditions. Byoung Koo Lee *et al.* [2] studied free vibrations of tapered beams with general boundary condition which involves finding an ordinary differential governing equation of beams which can be solved by numerical methods and the natural frequencies are calculated by combining the Runge Kutta method and the determinant search method. De Rosa *et al.* [3] considered the dynamic behavior of beams with an linearly varying cross-section in which the equation of motion is solved in terms of Bessel functions, and the boundary conditions lead to the frequency equation which is a function of four flexibility coefficients. De Rosa *et al.* [4] calculated the natural vibration frequencies of tapered beams by using the Euler-Bernoulli beam theory in the presence of an arbitrary number of rotationally, axially and elastically flexible constraints and the dynamic analysis is performed by means of the so-called cell discretization method (CDM), according to which the beam is reduced to a set of rigid bars, linked together by elastic sections, where the bending stiffness and the distributed mass of the bars is concentrated. Clementi *et al.* [5] studied the frequency response curves of a non-uniform beam undergoing nonlinear oscillations by using the multiple time scale method in which the axial inertia is neglected, and so the equations of motion are statically condensed on the transversal displacement only.

Firouz-Abadi *et al.* [6] investigated the transverse free vibration of a class of variable-cross-section beams using the Wentzel, Kramers, Brillouin (WKB) approximation in which the governing equation of motion of the Euler-Bernoulli beam including axial force distribution is utilized to obtain a singular differential equation in terms of the natural frequency of vibration and a WKB expansion series is applied to find the solution. Zamorska [7] used Green's function method for the free vibration problem of non uniform

* To whom correspondence should be addressed


PRINCIPAL
D.N.R. College of Engg. & Tech.
BHIMAVARAM-534 202

IOT BASED SMART GARBAGE AND WASTE GATHERING BIN

Panasa Naveen¹ Dr.S.Koteswari²,

¹B.Tech Student (159P1A0433), DNR college of Engineering, Bhimavaram, Andhra Pradesh, India.

²Professor, & HOD, Department of ECE, DNR college of Engineering, Bhimavaram, Andhra Pradesh, India.

ABSTRACT: To make the cities greener, safer, and more efficient, Internet of Things (IoT) can play an important role. Improvement in safety and quality of life can be achieved by connecting devices, vehicles and infrastructure all around in a city. In the present day scenario, many times we see that the waste bins or Dust bin are placed at public places in the cities are overflowing due to increase in the waste every day. It creates unhygienic condition for the people and creates bad smell around the surroundings this leads in spreading some deadly diseases & human illness. Thus we present a waste collection management solution based on providing intelligence to waste bins, using an

IoT prototype with sensors. In this proposed system there are multiple dustbins located throughout the city or the Campus, these dustbins are provided with embedded device which helps in tracking the level, gases and odour statuses of the waste bins. When the level reaches the threshold limit, the device will transmit the information of level and gas statuses of the bin. These details can be accessed by the concern authorities from their place with the help of Internet and an immediate action can be made to clean the dustbins.

KEY WORDS: Internet of things(IoT), Smart waste management, Embedded device,safety.

1.1 INTRODUCTION:-

Municipal solid waste management is one of the major environmental problem of Indian

landfills creating problems to public health and the environment. Presently our government has following three types to

cities. Improper management of municipal solid waste causes hazards to inhabitants. Various studies reveal that about 90% of MSW (Municipal Solid Waste) disposed of unscientifically in open dumps and

collect solid waste. Community bin collection House-to-House collection Collection on regular pre-informed

MECHANIZED OBJECT DETECTION ALGORITHM FOR URBAN SURVEILLANCE SYSTEM IN SMART CITIES USING INTERNET OF THINGS

S.Apparao¹ & Dr.S.Koteswari²

M.Tech Student¹, Professor & HOD²

Department of Electronics & Communication Engineering, DNR College of Engineering & Technology,
Bhimavaram, West Godavari District, A.P.

Received: August 30, 2018

Accepted: October 17, 2018

ABSTRACT

With the extension of keen meters, similar to the Advanced Metering Infrastructure (AMI), and the Internet of Things (IoT), each brilliant city is furnished with different sorts of electronic gadgets. In this way, gear and innovations empower us to be more astute and make different parts of savvy urban communities more open and material. The objective of the current paper is to give a comprehensive survey on the idea of the shrewd city other than their distinctive applications, advantages, and favourable circumstances. What's more, the vast majority of the conceivable IoT advancements are presented, and their capacities to converge into and apply to the distinctive parts of shrewd urban areas are talked about. The potential use of savvy urban areas as for innovation improvement later on gives another important exchange in this paper. In the mean time, some pragmatic encounters the whole way across the world and the key obstructions to its usage are altogether expressed. Automated protest location calculation is a vital research test in shrewd urban reconnaissance frameworks for IoT and savvy urban areas applications. Specifically, shrewd vehicle tag acknowledgment (VLPR) and vehicle recognition are perceived as center research issues of these IoT-driven wise urban observation frameworks. They are enter systems in the vast majority of the movement related IoT applications, for example, street activity continuous checking, security control of limited regions, programmed stopping access control, looking stolen vehicles, and so on. In this paper, we propose a novel brought together strategy for robotized protest discovery for urban observation frameworks. We utilize this novel technique to decide and select the most elevated vitality recurrence zones of the pictures from the computerized camera imaging sensors, that is, either to pick the vehicle tags or the vehicles out from the pictures[1]. Our proposed strategy can not just recognize question vehicles[2] quickly and precisely, yet in addition can be utilized to diminish enormous information volume should have been put away in urban reconnaissance frameworks.

Keywords: camera, microcontroller, gsm, iot

1. INTRODUCTION

Urban reconnaissance exhibits a security challenge in its exceptionally scope. To monitor a city against different dangers, oversee policing and native help jobs, and be totally safeguard requires innovation and framework engineering that is versatile and demonstrated. Brilliant transportation procedures and numerous urban reconnaissance frameworks are the uses of IoT(Internet of Things) in keen urban areas. In these applications, distinctive cameras/imaging sensors generally introduced to consequently distinguish and recognize potential vehicles/autos through mechanized question recognition strategies. Generally, such mechanized protest identification strategies request high-intricacy picture/information handling advances and calculations. Thus, the plan of low-complex computerized protest recognition calculations turns into a vital inquiry in structuring these programmed urban reconnaissance frameworks. Among these looks into, both vehicle tag acknowledgment (VLPR) and vehicle acknowledgment are the most vital research issues around the world, which can be connected to tackle numerous basic issues. One of the models where these advancements are connected is street movement information.

A vehicle enlistment plate ordinarily known as a number plate or a tag is a metal or plastic plate connected to an engine vehicle or trailer for authority vehicle ID purposes. All nations require enrollment plates for street vehicles, for example, autos, trucks, and bikes. Their necessity for different vehicles, for example, bikes, pontoons, or tractors, may fluctuate by ward. This enlistment identifier is a numeric or alphanumeric ID that extraordinarily distinguishes the vehicle proprietor inside the issuing district's vehicle enlist. In a few nations, the identifier is interesting inside the whole nation, while in others it is one of a kind inside a state or area. The variety of the identifier happens as indicated by the vehicle or the individual related with it. In particular, the tag acknowledgment, which incorporates the extraction of a data of a vehicle by examining a tag area from a picture, is the key module in a VLPR framework, which impacts the precision of the VLPR frameworks fundamentally. A wide range of calculations have been proposed for distinguishing a vehicle tag utilizing picture preparing. One run of the mill way is vertical edge[3]

International Journal of Scientific Research and Reviews

Emerging trends in Nanotechnology in Financial Fraud Protection for ATM/Smart Cards

Koteswari S.*

* Department of ECE, DNR College of Engineering, & Technology Bhimavaram, Andhra Pradesh, India.
Email: eshwari.ngr@gmail.com

ABSTRACT

Acknowledgment cards and money related data has turned out to be increasing in the present scenario. In any case, researchers are confident that another created nano unique finger impression can be implanted into cash, Visas, and contraptions that make it about difficult to fake an object. The execution of Robotized Finger impression Distinguishing proof Framework or Automated Fingerprint Identification System (AFIS) vigorously depends on how productively details are extricated. Most, if not all, AFIS look at particulars data, (for example, edge endings and bifurcation position) in type of sets of directions for confirmation or recognizable proof. Shockingly, look into on elective details extraction plans is rare. This paper, proposes the usage of the novel way to deal with unique mark acknowledgment in view of the extraction of particulars in type of roundabout strings, which are appropriate for rough roundabout string coordinating. Notwithstanding that, the proposed arrangement can distinguish the correct area and turn of the information unique mark paying little mind to its area on the sweep surface. This utilization of nanotechnology in charge cards can be recently the breakout and security for the individuals who are worried about their monetary strength and character theft. Using it is significantly more straightforward. You should simply put your approved finger on the sensor fix of the card while the installment terminal/machine requests your affirmation for the exchange that you are embraced. Not exclusively will this spare the banks who utilize it around the globe, a great many dollars however the shoppers who utilize it will be shielded from something other than monetary misfortune. They will likewise be shielded from wholesale fraud, which can run lives. The savvy metric framework that will be utilized as a part of these kind of cards, will be usable by over 90% of the universes ATM machines without rolling out any improvements.

KEYWORDS: ATM , Biometrics, Fingerprints, nanotechnology, Matching, Verification, Authorization.

***Corresponding author**

Dr. S. Koteswari*

Professor, Department of ECE,
DNR College of Engineering, & Technology
Bhimavaram, Andhra Pradesh, India.
Email: eshwari.ngr@gmail.com

H. Ayankumar
PRINCIPAL
D.N.R. College of Engg. & Tech.
BHIMAVARAM-534 202.