TEST Engineering & Management

January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

Standard Agricultural Drone Data Analytics using KNN Algorithm

S. Meivel
Assistant professor, Department of ECE,
M.Kumarasamy Engineering College,Karur, India, meivel.embsys@gmail.com.

S. Maheswari
Assistant Professor (Sr.Grade),Department of EEE,
Kongu Engineering College, Perundurai, India,maheswaribsb@gmail.com.

Article Info
Volume 82
Page Number: 206 - 215
Publication Issue:
January-February 2020

Abstract
Standard Drone - Agricultural data (Drone Network) get business support systems, opportunities, analysis of network data, business value, extensive telecom competence, user Experience, Optimization programming, get protocol Standardize, data stability execution and how to understand or how the relevant insights can be extracted from raw data before applying standard Drone - Agricultural data (Drone Network) techniques as needed. Good decision-making needed a successful business model for Telecom Management. Communication service provider helps Standard Drone - Agricultural data (Drone Network) analytics to solve the major problems to increase the growth of the business. Business Model Classified and tested each day in Telecom.

Such a platform analyzes incoming data in real-time, makes correlations, produces Standard Drone - Agricultural data (Drone Network) insights and exposes those insights to various applications. This approach both enhances the performance of each application and leverages the standard Drone - Agricultural data (Drone Network) investments across multiple applications. Storing and processing huge amounts of information is no longer the issue. The challenge now is to know what needs to be done within the standard Drone - Agricultural data (Drone Network) analytics platform to create specific value. Drone - Agricultural data dynamically change nodes to ensure optimal customer Expectation. This paper proposed to dynamically change the Standard Drone - Agricultural data (Drone Network) value can be optimized and performed with various applications.

Keywords: *Standard Drone - Agricultural data (Drone Network) value, network provider, Frequencies, service Provider, Telecom Technology.*

Article History
Article Received: *14 March 2019*
Revised: *27 May 2019*
Accepted: *16 October 2019*
Publication: *02 January 2020*

I. Introduction:

The standard information-driven telecom investigation showcase alone is relied upon to have a compound yearly Growth rate of almost 50 percent. Correspondence specialist organizations can make utilization of this standard enormous information to drive an extensive variety of imperative choices and exercises. These include designing more focused offers and bundles; prescribing the most alluring offers to supporters amid the shopping and requesting process; Speaking with supporters about their use, spending and buy alternatives; Configuring the system to convey more solid administrations; and checking to proactively revise any potential issues. Every one of these exercises empowers enhanced client encounters, expanded consumer loyalty, more astute systems and stretched out system usefulness to encourage advance into the arranged society.

Enhanced continuous availability and information administration empowers the

January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

formation of custom-fitted informational indexes, promptly accessible for examination and machine learning. This empowers information-driven effectiveness enhancements in a few business regions – for instance, transport, coordination, vitality, farming and ecological insurance. Besides, basic leadership in business and society will be encouraged by access to experiences because of more precise and progressive information.

II. For standard Agricultural data (Drone network):

Steadfast basic leadership will progressively be driven by examination created bits of knowledge. What does more, the more exact and auspicious these are the better possibility a robotized chief needs to foresee and benefit from the change? The keys to viable information are driven basic leadership are the capacity to filter through a lot of information, and the capacity to join information from a few sources to pick up a more exhaustive perspective of the business. Irrelevant information can wind up pivotal For example, a Communication specialist organization will have the capacity to organize VIP supporters, give premium administration in a particular district and spotlight on client involvement with social duty.

III. Value-creating services:

Currently, standard huge information is seen pretty much from an innovation point of view: the likelihood of better stockpiling, the capacity to process data and make it accessible continuously and the capacity to manage different sorts of information sources, including organized, semi-organized and unstructured ones. The innovation exists, so the fundamental issue is how communication benefits supplier can comprehend the enormous volumes of information are in this way beginning to look past customary standard huge information strategies and spotlight on the investigative esteem that can be picked up from changing tremendous volumes of perplexing and high-speed information into business experiences. Bleeding edge, IT segments like information stockpiling, information administration and system assets are the premises, over which Communication specialist organization need to apply telecom-particular diagnostic rationale to bring business benefits and amplify capital speculations.

To misuse the maximum capacity of OSS/BSS, the Communication specialist organization needs to improve these frameworks with ongoing and prescient examination usefulness to help computerized choices, for example, nonstop updates of system reserves in view of where a client is relied upon to move to straightaway or the offer of dynamic memberships in light of anticipated administration utilization. The more constant effectiveness an examination work gives the more esteem it can convey to tasks. Putting away all information in an extensive database and afterward-running questions on top is a guileless methodology that will neither scale nor give the examination abilities required. OSS/BSS administration's usefulness given the investigation, for example, client encounter administration, end-to-end execution observing and gadget administration, permits the Communication specialist co-op to all the more successfully handle the expanded unpredictability of system administration, Mobile to Mobile and consistently expanding information volumes.

IV. Operations of standar agricultural data (drone network):

To get an incentive from standard enormous information, Communication specialist organization must recognize what information to utilize, how to process, relate and constrain the information, and how to decipher and apply the subsequent bits of knowledge to various procedures. System information can be either client information transported by the system or information created by the client gadget or system

January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

component including the center, transport, terminal, CRM, Home Subscriber Server, charging and billing, service proxy, policy nodes, self-care application, the Communication Service Provider's web. Three center zones have been recognized in which Communication specialist co-op can amplify the estimation of their information resources: enhance activities, advance tasks and make new business openings.

Tasks can be improved utilizing experiences gathered from organize information to guarantee to arrange assets are utilized where they create generally esteem. For instance, interfacing the examination work near the information source diminishes the understanding postponement. The system close information investigation incorporates ongoing dispersed preparing to gather, correspond and dissect information from all parts of the system, and besides, from-tests To enhance task, a communication specialist organization can break down client conduct and distinguish new item contributions that will address their issues all the more successfully. This kind of understanding will turn out to be more essential as the organized society takes shapes and correspondence includes even more new gadget compose

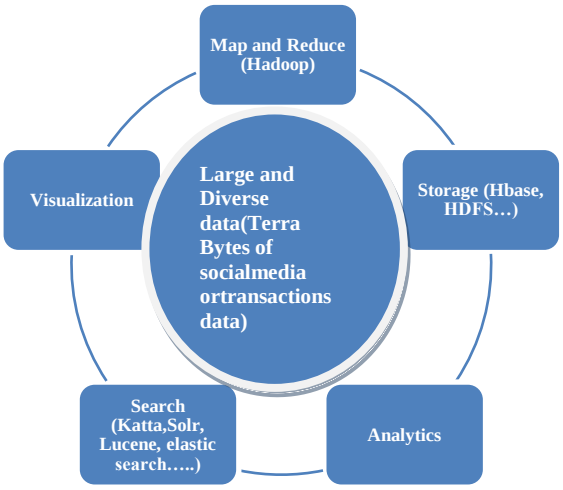


Fig1: Mapping Technique

With new bits of knowledge, esteem can be made both for existing and new endorsers. Precedents of bits of knowledge that can be gathered naturally incorporate portability designs that can advise civil transportation offices on how best to design their transport courses. In a few utilize cases, the income chain depends on a B2B display.

V. Protection level:

Improved availability and figuring power, and besides expanded take-up of standard huge information advances, give chances to Communication specialist organization as well as offer adapt to present circumstances as far as security and particularly protection. How much standard huge information investigation presents security challenges differs, contingent upon the sort of information that is prepared. While security difficulties can regularly be tended to with set up methods, the difficulties as far as protection frequently have diverse viewpoints that call for better approaches for utilizing the built-up strategies or even new systems. New difficulties incorporate the assurance against abuse of individual information created by connecting diverse information sources, and also the important changes to protection upgrading innovations because of the expanding sum and quickly changing nature of the information.

Directions are likewise nation particular and may change in their way to deal with advancements in standard enormous information innovation. Protection difficulties can be tended to by immovably coordinating security mindfulness into the methods for working and making security contemplations into each stride of the outline procedure of another item or administration. This incorporates considering the entire information life cycle administration, from accumulation to preparing, stockpiling, lastly eradication. Inside procedures can be balanced and their quality communicated by performing privacy audits. Institutionalization exercises, for example, the presentation of the ISO 29100

TEST Engineering & Management

January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

standard can likewise bolster inner work. Specialized ways to deal with address security and protection include established security techniques such as encryption for secure correspondence and secure information stockpiling, and refined utilization of setting up systems, for example, stringent and granular access control. Nevertheless, they likewise incorporate specific systems, for example, balanced information accumulation, and robotized information life cycle administration, reviews and logging, and anonymization strategies.

Example-1:

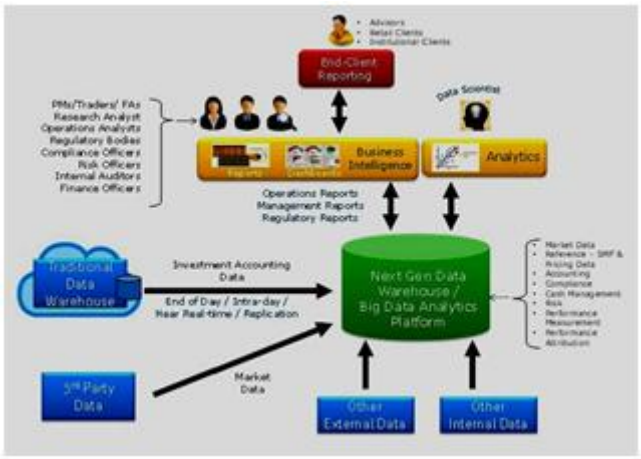


Fig2: Expanded standard Agricultural data (Drone Network)

Investigation empowers Communication specialist organizations to transform standard huge information into noteworthy bits of knowledge. What's more, at last, investigation will help the Networked Society advance by tending to gadgets; arrange availability development, reception of M2M, development of the cloud and new business openings. A critical boundary to Communication specialist co-op applying standard huge information examination to their Arrangements is that the information accessible from organizing components, BSS frameworks, tests et cetera is ordinarily rudimentary. The handling, blend and appropriate understanding of this information requires wide and profound convention and framework learning. Then again, the information handling must be in amicability with the application to business utilize cases, which requires cautious determination of those points of interest that must be transported higher up in the preparing chain. To lift these obstructions, telecom-particular examination stages are required that, from one viewpoint, have worked in space ability to make an interpretation of crude system information to more important yet rudimentary bits of knowledge. This skill can incorporate portability, QoS, gadget ability and over-the-top understanding. Then again, these stages must give the methods, (for example, through application programming interfaces (APIs) and programming improvement units (SDKs)) to aid the advancement of Communication Service Provider investigation utilize cases To separate important business esteem utilizing analytics, the standard enormous information stack should be extended with various parts and innovations.

Therefore, these are:

1. The administration of information resources, with continuous encryption for secure correspondence and secure information stockpiling, and refined utilization of set up systems such as Process control for investigation,

2. Scaling up investigation to pick up experiences from standard huge information, and additionally the capacity to take care of progressively complex issues utilizing more information,

3. An investigation as-a-benefit approach and the adaptability to pick among nearby and facilitated arrangement alternatives,

4. Securing buyer security, while as yet separating applicable and opportune data from information,

5. Most vitally, stages and SDKs, area particular investigation

6. Access to specialists to guarantee that genuine bits of knowledge are being separated.

TEST Engineering & Management

January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

Table1: Frequency Range

Major Technologies	GSM	GPRS	GPS	4G	5G
Frequency range	900 &1800 MHz	850,900, 1800, & 1900 MHz	1575 Mhz	1.8 Ghz& 2.6 Ghz	15 Ghz

Chances and opportunities

The examination is fundamental to efficiencies and business the enablement of expense innovation across all Communication specialist organization business sections. As needs are, arrangements should give cross-area bolster typical engineering to expand reusability, spryness and strategically pitching of examination applications in light of encouraged utilize cases. Bits of knowledge can be uncovered through a coordinated and intuitive stage that executes or reuses existing APIs and SDKs, enabling different applications to be bolstered by the same hidden information framework.

Two assets telecom companies:

i. Probes are executions that gather data for conveying it to arrangements fit for dissecting it.

ii. Appliances are gadgets fit for both conglomerating and investigating information, yet the completed insight created by these procedures is put away locally.

Two efforts for quality signals:

i. Telecoms have possessed the capacity to essentially diminish information bundle misfortune, which happens when systems are over-burden.

ii. Real time-stamping makes correct estimations of jitter and deferral in versatile systems, enabling telecoms to enhance client encounters

Perfect networks:

Systems that are more astute enhance the utilization of the system the shopper encounter. This empowers the conveyance of even more convincing administration contributions. The blend and conduct of administrations are not static. Every day, new administrations wind up accessible in application stores and system activity designs for singular administrations change after some time. It is hence imperative to have arrangements that catch pertinent qualities and exceed expectations in an evolving condition. Standard huge information investigation gives the methods for such substantial scale factual examination for watching and foreseeing activity designs, and in addition rapidly identifying pattern movements and irregularities.

A precedent utilization of standard enormous information examination for more quick-witted systems is the forecast of ideal system parameter settings in light of the characteristics of the traffic, to reduce battery utilization on the client gadget while not expanding system delay. Self-arranging systems effectively utilize organize close investigation in arranging, building and Upgrading system assets. All Self-sorting out networks automation is such provisioning, configuration and appointing. It tends to be adjusted to changes in nature and movement request in light of the experiences picked up from standard huge information investigation. Finally, innovative systems will give universal versatile correspondence for individuals as well as for associated things. This will include new difficulties, for example, the capacity for the system to deal with countless gadgets requiring little to no effort and the requirement for expanded vitality execution on both the customer and system side – challenges where standard enormous information examination will assume a vital job.

TEST Engineering & Management

January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

e. Usage

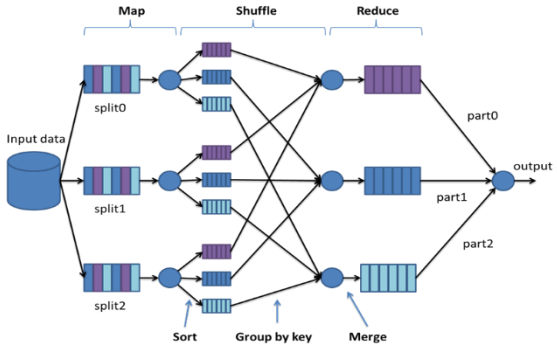
Standard huge information investigation uncovers what the Communication Service Provider has to know to have the capacity to make convenient moves to determine issues that affect the client crosswise over gadgets, memberships, administrations and system assets. For example, CEM frameworks screen and break down the individual client experience of portable broadband administrations and voice. Applying investigation to such information empowers a Communication Service Provider to anticipate which endorsers are best for up-offering or re-profiling keeping in mind the end goal to focus on their requirements better. Contrasted and most different enterprises, Communication specialist organizations are in a one of a kind position; couple of different organizations can possibly quantify essentially each utilization of their administrations progressively per purchaser.

f. Plans of action

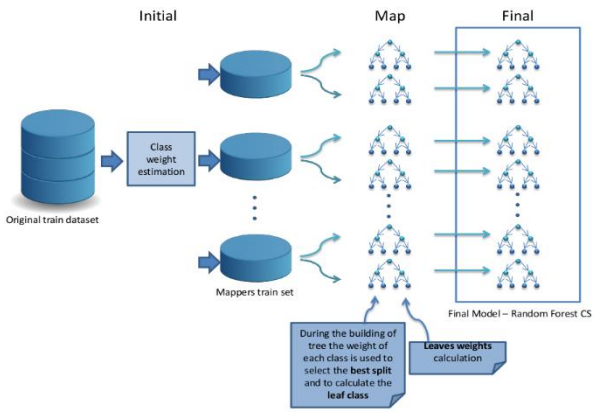
New income streams can be caught – adapting the information that the Communication Service Provider possesses – by utilizing the significant information removed from client information. This learning is frequently important to an assortment of potential colleagues. For example, information about shopper esteem, consumer loyalty, or customer fragment can be overlaid onto geo area information, making a perspective of groupings of different sorts of consumers. Analyzing this information collection can help with focused promoting, business speculation arranging (where to find) or occasion arranging. Normally, these open doors are sought after through accomplices, and utilizing amassed – instead of an individual – information winds up imperative for both down to earth and security reasons. Information adaptation is the procedure of capturing, storing and overseeing suitable information, performing an examination to recognize key patterns and examples, and offering the found bits of knowledge to the individuals who can make an incentive from them. Sharing information in a for each endorser based is not appropriate to adapted information administrations.

g. Map-reduce

Map reduce concept cover input data merged shuffled and reduced to divide some parts. Finally, all parts are added to in online. That is called map reduced Drone - Agricultural data (Drone Network).



h. Random forest algorithm

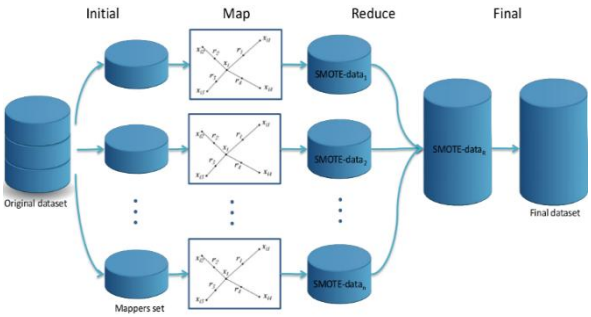


Random forest algorithm measures mappers train set using class weight estimation. It is converted using Random forest CS without leaves weights and classes.

TEST Engineering & Management

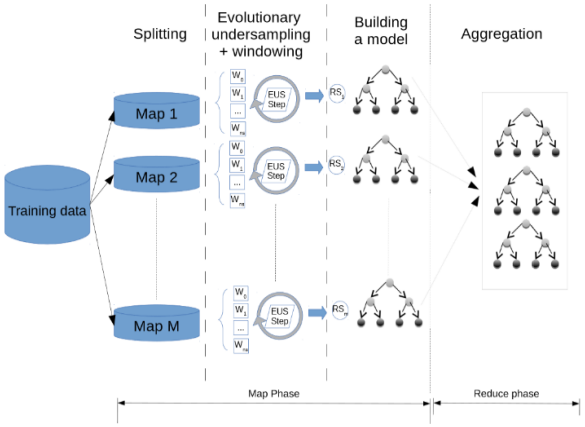
January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

i.Oversampling rate



Oversampling rate measures original rate from suppressed data from final dataset. It may be merged or shuffled. But it is reduced size data.

j.Under sampling



Under sampling given splitting, under sampling and building model. They finally Aggregated data without errors.

k. KNN IS algorithm

KNN algorithm is k nearby neighbor algorithm using MAP partition and reduce by key.

l. Completion algorithm for competition

Step1: identify the problem in data merging

Step2: use random oversampling and random forest algorithm in the network

Step3: Analysis the true positive rates and negative rates

Step4: Add feature selection

Step5: Print Final results from receiver work.

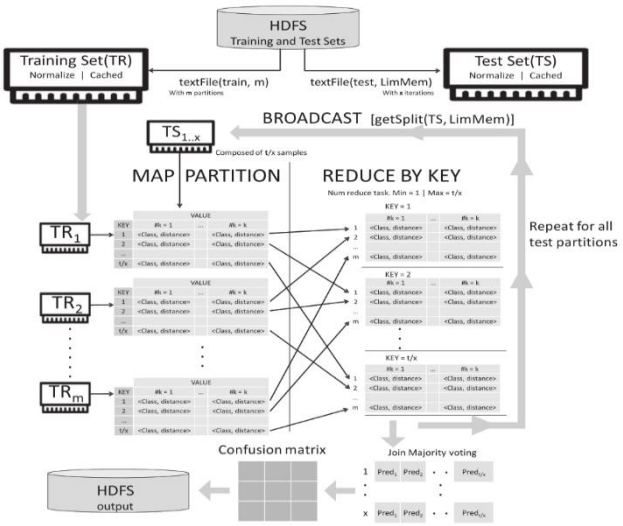
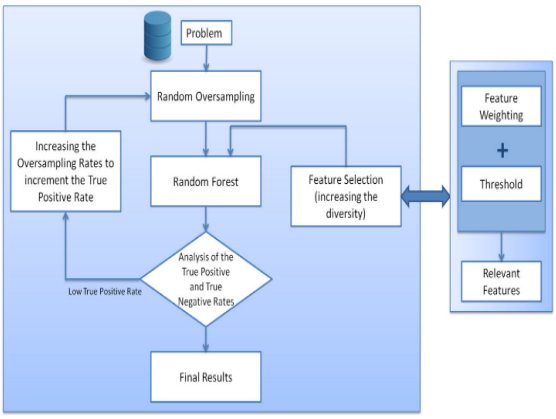
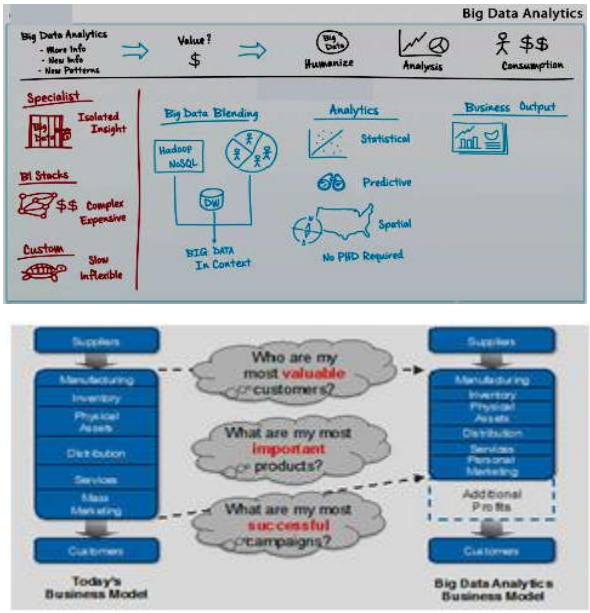


Fig3 : KNN algorithm



Example 1: Sample planning-I



Conglomerating, outlining, anonymizing, and bundling information in a way that is profitable to

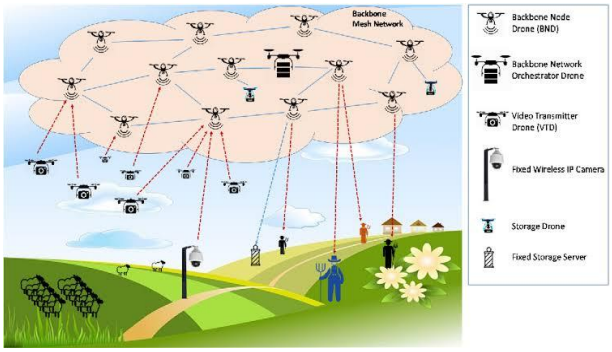
January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

accomplices, outsiders are, for example, sponsors, content distributers, and internet based life. Along these lines requires framework, frameworks and interfaces, and additionally a clearinghouse and market for information trade.

VI. Marketing:

Viable advertising requires exact bits of knowledge into encounters and an assessment of these, however with the presentation of standard huge information examination it is conceivable to do unmistakably precise consumer loyalty expectations, since it empowers multifaceted and multisource investigation. CEM frameworks gather total and dissect occasions in the supplier's system and other operational frameworks to give bits of knowledge about the shopper encounter, including prescribed activities.The assessed customer driven, continuous bits of knowledge in regards to gadgets, client conduct, relevant information and system information enable advertising offices to distinguish purchasers with poor client encounter.

Example 2:



The endorser base is investigated to distinguish supporter client bunches as indicated by a wide scope of parameters, in various blends. It takes client information, for example, charging and statistic data, from both system components and related sources to give a total photo of the client to recognize the most profitable and powerful ones, and pinpoint which of them might be unsatisfied system depreciators. There are numerous difficulties; a run of the mill precedent is that standard enormous information accumulations or streams might be improved for scaling, for instance by amassing information near the source. This, thus, may affect the precision of the information examination and the experiences accessible for advertising. Information accumulation ought to in this manner be improved to as awesome a degree as conceivable to profit the utilization cases and experiences.

VII. Conclusion:

While standard huge information stockpiling and handling procedures are vital empowering influences, the objective must be the production of the correct utilize cases. The standard huge information instruments and advancements conveyed need to help the way toward discovering bits of knowledge that are sufficient, precise and noteworthy. Genuine information-driven knowledge calls for space aptitude. For the Communication specialist organizations, this implies top to bottom learning of how the system capacities, what information to pull from the system's hubs and a comprehension of how to associate information from different sources end-to-end to yield an improved arrangement of data sources. Understood about business emotionally supportive networks, openings, investigation of system information, business esteem, broad telecom skill, client Experience, Optimization programming, get convention Standardize, information steadiness execution, understanding for applying standard huge information strategies, Good basic leadership, information quality, information maintenance and effective plan of action for Telecom Management. At that point, found out about how to take care of the real issues for increment the development of business and tried utilizing Business Model. We tried for culminating systems, plans of action, the security level of standard Big information, resources of telecom signs, and quality signs, Systems that are more astute, client encounter administration, information expediting and advertising are only a

January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

few models of what is conceivable. At last, bits of knowledge can substitute change conduct to guarantee an advance endorser Knowledge. In this way the powerfully change the Standard huge information esteem can be advanced and performed with different applications. In the future, Standard Big information can be acknowledged and effortlessly conveyed from the sender to the client. KNN IS algorithm and Completion algorithm for the competition is implemented and Analyzed marketing.

References

1. A. Youssef and M. Alageel, "Security Issues in Cloud Computing", the GSTFInternational Journal on Computing, Vol.1 No. 3, 2011.
2. High-Performance Computing and Drone - Agricultural data (Drone Network) Analytics – Paradigms and ChallengesTulasi.B Ph.D. Scholar, Computer Science Jain University, Bangalore, International Journal of Computer Applications (0975 – 8887)Volume 116 –No. 2, April 2015,28.
3. S.Palanivel Rajan, T.Dinesh, "Analysis of Human Brain Disorders for Effectual Hippocampus Surveillance", International Journal of Modern Sciences and Engineering Technology, Vol. 2, Issue 2, pp.38-45, 2015.
4. S.Palanivel Rajan, "A Significant and Vital Glance on "Stress and Fitness Monitoring Embedded on a Modern Telematics Platform", Telemedicine and e-Health Journal, Vol.20, Issue 8, pp.757-758, 2014.
5. N. Fernando, S.W. Loke, and W. Rahayu, "Mobile Cloud Computing: A Survey", Future Generation Computer Systems, vol. 29, pp. 84 - 106, 2013.
6. Quadcopter UAV based fertilizer and pesticide spraying system Authors by SM ME, R Maguteeswaran, NG BE, G Srinivasan, International Academic Research Journal of Engineering Sciences Vol. no.1 issue no 1, February 2016, Page No.8-12.
7. Remote sensing for UREA Spraying Agricultural (UAV) system, S Meivel, K Dinakaran, N Gandhiraj, M Srinivasan, Advanced Computing and Communication Systems (ICACCS), Jan. 22 – 23, 2016, Coimbatore, INDIA.
8. S.Palanivel Rajan, T.Dinesh, "Systematic Review on Wearable Driver Vigilance System with Future Research Directions", International Journal of Applied Engineering Research, Vol. 2, Issue 2, pp.627-632, 2015.
9. S.Palanivel Rajan, S.Vijayprasath, "Performance Investigation of an Implicit Instrumentation Tool for Deadened Patients Using Common Eye Developments as a Paradigm", International Journal of Applied Engineering Research, Vol.10, Issue 1, pp.925-929, 2015.
10. M.Manikandan,N.V.Andrews, V.Kavitha, "Investigation On Micro Calification Of Breast Cancer From Mammogram Image Sequence" International Journal of Pure and Applied Mathematics, Online ISSN No.: 1314-3395, Print ISSN No.: 1311-8080, Vol. No.: 118, Issue No.: 20, pp. 645-649,2018. (SCOPUS)
11. S.Palanivel Rajan, T.Dinesh, "Statistical Investigation of EEG Based Abnormal Fatigue Detection using LabVIEW", ", International Journal of Applied Engineering Research, Vol. 10, Issue 43, pp. 30426-30431, 2015.
12. S.Palanivel Rajan, C.Vivek, M.Paranthaman, "Feasibility Analysis of Portable Electroencephalography Based Abnormal Fatigue Detection and Tele-Surveillance System", International Journal of Computer Science and Information Security, ISSN No.: 1947-5500, Vol. No.: 14, Issue : 8, pp. 711-722, 2016.
13. High Efficiency Hybrid Intelligent Street Lighting Using A Zigbee Network And Sensors by A Hariharan, S Meivel in i-manager's Journal on Embedded Systems, Vol. 2 l No. 3 l August - October 2013.
14. Micro machined Multilayered Miniaturized Filter by MS S.Meivel,Mariselvam.V in International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-7, Issue-6S4, April 2019.
15. S.Palanivel Rajan, "Diagnosis of Cardiovascular Diseases using Retinal Images through Vessel Segmentation Graph", Current

January - February 2020
ISSN: 0193 - 4120 Page No. 206 - 215

Medical Imaging Reviews, Online ISSN: 1875-6603, ISSN: 1573-4056, Vol. : 13, Issue :4, DOI : 10.2174/1573405613666170111153207, 2017.

16. S.Palanivel Rajan, "Review and Investigations on Future Research Directions of Mobile Based Tele care System for Cardiac Surveillance", Journal of Applied Research and Technology, Vol.13, Issue 4, pp.454-460, 2015.
17. S.Palanivel Rajan, R.Sukanesh, "Experimental Studies on Intelligent, Wearable and Automated Wireless Mobile Tele-Alert System for Continuous Cardiac Surveillance", Journal of Applied Research and Technology, ISSN No.: 1665–6423, Vol. No. 11, Issue No.: 1, pp.133-143, 2013
18. S.Palanivel Rajan, R.Sukanesh, "Viable Investigations and Real Time Recitation of Enhanced ECG Based Cardiac Tele-Monitoring System for Home-Care Applications: A Systematic Evaluation", Telemedicine and e-Health Journal, ISSN: 1530-5627, Online ISSN: 1556-3669, Vol. No.: 19, Issue No.: 4, pp. 278-286, 2013.
19. E Health Real Time Monitoring System using IoT Sensor (ESKIN) Methodology by S Meivel, SGH S.Charanyameenachi, D.Supritha, International Journal of Recent Technology and Engineering (IJRTE) volume 8 (issue - 3S), February 2019.
20. Technical Design of Agricultural UAV-Frame Mechanism by S.Maheswari&S.Meivel in International Journal of Control Theory and Applications volume 10 (Issue number 33), page no 1-22,2017.
21. S.Palanivel Rajan, et.al., "Intelligent Wireless Mobile Patient Monitoring System", IEEE Digital Library Xplore, ISBN No. 978-1-4244-7769-2, INSPEC Accession Number: 11745297, IEEE Catalog Number: CFP1044K-ART, pp. 540-543, 2010.
22. S.Palanivel Rajan, et.al., "Cellular Phone based Biomedical System for Health Care", IEEE Digital Library Xplore, ISBN No. 978-1-4244-7769-2, INSPEC Accession Number: 11745436, IEEE Catalog Number: CFP1044K-ART, pp.550-553, 2010.
23. S. Chaudhuri, U. Dayal, and V. Nara - says, "An Overview of Business Intelligence Technology," Comm. ACM, vol. 54, no. 8, Aug. 2011, pp. 88–98.
24. M. Armbrust, A. Fox, R. Griffith, A. Joseph, R. Katz, A. Konwinski, G. Lee, D. Patterson, A.Rabkin, I. Stoica, and M. Zaharia, "A View of Cloud Computing" Communication of the ACM, Vol. 53, No. 4, April 2010.
25. Advanced Liquid Organic Fertilizer Irrigation Management System for Combined Agriculture by S. Meivel in International Journal of Control Theory and Applications. volume 10 (issue number 33), page no 1-22, 2017.
26. Sensorless Control of BLDC Motor Drive Using a Hysteresis Comparator and back Emf technique by S Meivel, A Vennila, A Govindarasu in International Journal of Research and Engineering volume 2 (issue 2), page no 25-32, 2017.
27. Remote Sensing of Bio-Medical Healthcare System for Mobile Patients by S Meivel, V Mariselvam in Bioscience biotechnology research communications, volume - 11 (2), page no 5 – 13, DOI: 10.21786/bbrc/11.2/2.
28. Unmanned Agriculture System Model Design using PLC by S.Meivel in International Journal of Innovative Research in Computer and Communication, Volume 5 , Issue 3 and March 2017 - ISSN(Online): 2320-9801.
29. Design of flight data transmitter for black-box detection at airplane crash by SMeivel, R Maguteeswaran, S Rajalakshmi in Indian Journal of Engineering 13 (33), 508-518.
30. UAV- Real Time Video Stabilization UsingOPENCV Technical Analysis by S. Meivel, A.Nivetha, M.Ramkumar, S.Mohanapriya, R.Poongodi, in International Journal of Innovative Research in Computerand Communication EngineeringVol. 5, Issue 3, March 2017.