

A Study on The Usage of Deep Learning in Artificial Intelligence and Big Data

Anitha Eemani

Sr. Java Full Stack Developer, National Association of Insurance Commissioners (NAIC), USA

ABSTRACT

Machine learning is a paradigm that may pertain to getting coming from previous competence (which within this circumstance is previous records) to improve potential capability. The main emphasis of the industry is automated finding techniques. Recognizing illustrates adjustment or perhaps renovation of procedure based upon past "journeys" automatically without outside help from the individual. Machine learning within this brand-new time is illustrating the pledge of generating constantly accurate estimates. The machine learning body properly "knows" just how to anticipate from direction set of completed tasks. The major intended along with the add-on of the client review is actually to preserve the research study on professional estimation, i.e. to relieve numerous other analysts for suitable expert assessment researches making use of machine-learning techniques.

Keywords : Machine Learning, Frameworks, Similarities

I. INTRODUCTION

While making a producer (a software application device), the developer frequently has a detailed objective in mind. As an example, consider J. K. Rowling's Harry Potter Set and also Robert Galbraith's Cormoran Strike Prepare. To legitimize the case that it was Rowling who had composed those publications under the label Galbraith, pair of experts were included due to the Greater London Sunday Times along with making use of Forensic Machine Learning they managed to confirm that the insurance coverage claim was true. They create a machine learning formula as well as likewise "taught" it with Rowling's in addition to other writers writing cases to find as well as recognize the rooting layouts as well as later on "examination" the books through Galbraith. The formula ended that Rowling's as well as Galbraith's creating matched the absolute most in countless facets.

Therefore as opposed to making a protocol to handle the difficulty directly, taking advantage of Machine

Learning, a professional locate a method whereby the unit, i.e., the formula is going to surely develop its very own option based on the case or training reports specify delivered to it at first.

The methods of machine learning and expert system deal sizable perks to monetary option manufacturers about new approaches to options in and additionally projection- ing stemming from files. This has been recognized due to the financial business, with around \$28 billion yearly thought to become committed internationally as a result of the funding institutions on expert system modern-day innovations via 2021 (IDC, 2018). Trick existing money artificial intelligence demands stay in mathematical trading, risk monitoring, as well as additionally technique computerization. However, analysis of these topics amongst money management analysts has straggled practice. In this particular specific paper, our provider as a result carefully constructs this body system of literary works for the perk of analysts looking for to understand the methods as well as likewise locations

of the interest rate of machine learning and artificial intelligence in financing. For usual understanding, our staff initially for some time deliver our operating definitions of expert system procedures. Artificial intelligence (AI) is a sunshade phrase for a stable of approaches featuring intelligence shown via equipment, using this intelligence typically kept an eye on foresight. In a money condition, as a result of its algebraic focus, among the best relevant AI procedures have been really machine learning (ML): predictive formulas and also designs entailing logical understanding coming from records; as well as likewise a great deal even more only recently deep learning (DL): a technique that allows a lot more abstracted discovering arising from not known alliances within the input info. DL is an approach that has evolved coming from an earlier take notice of artificial semantic networks. Throughout this paper, our staff commonly define ML and also DL under a mixed relationship to ML, as DL is a sub-field of ML. Of added relevance in the toolkit of AI is natural language processing (NLP), centered on the understanding and likewise study of textual information. NLP delivers the prospective to blend the massive body system of textual documents in uncovering in addition to projection and also overlaps alongside ML to the amount that ML methods might be related to NLP documents. The strategy conducted within this particular investigation, topic selections in, is an ML treatment of NLP, for this reason including a variable of teamwork to our study alongside using an ML strategy to understand investigation on ML in financial.

II. DEEP LEARNING TECHNIQUES AND FRAMEWORKS

Various deep learning protocols help boost the understanding functionality, widen the ranges of treatments, and simplify the estimate process. Nevertheless, the very long instruction opportunity

for deep learning versions remains a major issue for the researchers. Additionally, the category precision can be drastically boosted through increasing the measurements of training information and model specifications. To increase deep blue sea learning processing, several enhanced techniques are proposed in the literary works. Deep learning structures mix the implementation of modularized deep-seated knowing protocols, optimization techniques, organization techniques, and also assistance to infrastructures. They are cultivated to streamline the application procedure and increase the system-level establishment and analysis. In this area, some of these representative techniques as well as frameworks are offered.

Unsupervised Learning

In contrast to the vast volume of work done in closely watched deep learning, extremely few researches have taken care of the unsupervised knowing trouble in deep learning. Nonetheless, in recent times, the benefit of finding out reusable functions making use of unsupervised techniques has presented encouraging cause various requests. In the last years, the tip of having a self-taught discovering framework has been commonly explained in the literary works.

In the current handful of years, generative models like GANs and VAEs have become leading techniques for unsupervised deep learning. As an example, GANs are trained and reused as a fixed function extractor for administered tasks. This network is based upon CNNs and has shown its superiority as unsupervised discovering in aesthetic data evaluation. In one more job, a deep sparse Autoencoder is taught on a very massive image dataset to know attributes. This network creates a top-level feature extractor coming from unlabeled data, which may be utilized for skin detection in an unsupervised way. The generated features are additionally discriminative enough to detect other higher-level items like pet faces or even human bodies. [3] recommend a generative stochastic network for unsupervised understanding as a

substitute to the max possibility that is based on switch operators of Markov establishment Monte Carlo.

In practice, a really couple of individuals possess the luxury of accessing quite high-speed GPUs as well as strong components to train an incredibly deeper network from the ground up in a realistic opportunity. Consequently, pretraining a deep network (e.g., CNN) on large-scale datasets (e.g., ImageNet) is very typical. This strategy is likewise referred to as transactions learning, which may be done by using the pre-trained networks as taken care of function extractors (especially for little brand-new datasets) or tweak the weights of the pre-trained model (particularly for large brand new datasets that are similar to the original one). In the latter, the version should continue the knowing to adjust the body weights of all or a number of the high-level parts of the deep network. This method can be looked at as semisupervised learning, in which the designated information wants to qualify an entire deep-seated network.

Online Learning

Generally, the network topologies and also architectures in deep learning are time static (i.e., they are predefined before the knowing starts) as well as is additional opportunity regular. This restriction on schedule complexity poses a severe challenge when the data is streamed online. Online understanding previously came into a conventional research study, but simply a small development has been noticed in online deep learning. Traditionally, DNNs are built upon the Stochastic Gradient Descent (SGD) technique through which the training examples are utilized independently to upgrade the design guidelines with a recognized label. The necessity is actually that rather than the sequential processing of each sample, the updates need to be used as set processing. One approach was presented where the samples in each set are alleviated as Independent as well as Identically Dispersed (IID). The set handling

method proportionally stabilizes computer resources and execution opportunities.

Yet another problem that accumulates on the concern of online knowing is high-velocity data along with time-differing distributions. This problem stands for retail and also banking records pipelines that support remarkable service worths. The present premise is actually that the data is largely enclosed the opportunity to properly suppose piecewise stationarity, thereby possessing a similar circulation. This belief defines information with a specific level of connection and also develops the designs accordingly. Regrettably, these nonstationary data flows are not IID and are usually longitudinal records streams. Also, online discovering is frequently moment delimited, is more challenging to parallelize, and also calls for a linear discovering fee on each input example. Developing methods that can online learn come from non-IID records would certainly be a huge jump onward for significant records deep learning.

Optimization Techniques in Deep Learning

Qualifying a DNN is an optimization process, i.e., finding the parameters in the network that minimize the reduction feature. Virtual, the SGD procedure is an essential protocol put on deep learning, which iteratively changes the specifications based on the slope for each training sample. The computational difficulty of SGD is less than that of the original incline descent technique, through which the entire dataset is looked at every time the criteria are upgraded.

In the knowing process, the improving speed is managed due to the hyperparameter knowing the cost. Reduced discovering prices are going to eventually lead to an ideal state after a long period, while higher understanding costs tooth decay the reduction quicker but may cause variations during the instruction. If you want to control the oscillation of SGD, the idea of using a drive is offered. Motivated by Newton's very first rule of movement, this strategy gets a quicker

convergence and proper energy that can easily boost the optimization results of SGD.

On the other hand, many techniques are proposed to calculate the appropriate learning cost. Primitively, weight degeneration and also knowing rate tooth decay are launched to change the knowing percentage and also accelerate the convergence. A weight decay operates as a charge coefficient in the price functionality to avoid overfitting, and a discovering fee tooth decay may minimize the discovering fee dynamically to strengthen the functionality. Moreover, adjusting the learning price relative to the incline of the previous phases is discovered helpful to avoid the fluctuation. Adagrad is the first adaptive formula that successfully made use of deep learning. It intensifies the learning fee for infrequently updated criteria and also restrains the understanding rate for the frequently improved guidelines by documenting the accumulated bribed slopes. Given that the balanced inclines are constantly good, the discovering cost of Adagrad may become exceptionally tiny as well as carries out certainly not improve the model any longer.

III. SIMILARITIES AND DIFFERENCES IN ML AND DL

There are many challenges involving the relationship between ML, DL, as well as adding artificial intelligence (AI). AI is a new specialized scientific research that research studies as well as sets up concepts, techniques, techniques, and also asks for that copy, expand, and also extend individual intelligence. It is a branch of computer technology that finds to acknowledge the essence of intelligence and also to make a new form of clever device that responds in a way similar to individual intelligence. Examination in this field features robotics, pc system vision, attributes language processing as well as also expert systems. AI may mimic the info method of individual consciousness, presuming. AI is not private intelligence, nonetheless thinking like a human may also exceed private intelligence.

ML is a branch of AI in addition to is carefully relating to (and also frequently overlaps alongside) computational stats, which additionally focuses on prediction making using computers. It possesses tough organizations to mathematical optimization, which gives tactics, ideas, and additionally demand domain to the market. ML is sometimes conflated with information exploration, nonetheless, the final subfield focuses far more on preliminary information research and is named unsupervised knowing. ML can furthermore be unsupervised and be made use of to find in addition to set up guideline individual profile pages for numerous facilities and afterward used to locate notable irregularities. The innovator of ML, Arthur Samuel, established ML as a " technique that offers laptops the ability to find out without being explicitly configured." ML mostly pays attention to the classification and also regression based upon popular elements previously profited from the instruction documents.

DL is a new region in the machine-learning analysis study. Its very own incentive depends upon the establishment of a neural network that mimics the human brain for reasonable understanding. It copies the human mind tool to decode information like graphics, looks, and additional information.

The guideline of DL was highly recommended by [5] based upon deep blue sea suggestion network (DBN), whereby an unsupervised cash grubbing layer-by-layer instruction procedure is planned that gives foresee dealing with the optimization issue of a deeper construct. At that point, a deep blue sea platform of a multi-layer automatic encoder is encouraged. Atop that, the convolution semantic network recommended by [6] is the very first real multi-coating structure knowing algorithm that uses a region member of the family hookup to reduce the number of specs to enrich the direction capability.

DL is a machine-learning procedure based on a picture of files discovering. An evaluation, like a graphic, maybe cooperated a variety of methods, consisting of a vector

of each pixel immensity market value, and even more abstractly as a collection of edges, a region of a certain problem, or even such. Using certain examples makes it a lot easier to find out jobs arising from instances. In a comparable way to ML methods, DL approaches likewise have a supervised understanding as well as unsupervised finding out. Discovering designs established under numerous recognizing platforms are fairly different. The perk of DL is making use of unsupervised or maybe semi-supervised component learning and also ordered functionality removal to efficiently replacement characteristics by hand.

The variations in between ML in addition to DL consist of the following:

Records reliances. The significant distinction between deep learning as well as additionally traditional machine learning is its performance as the number of relevant information increases. Deep learning methods do not perform at the same time when the data quantities are a really little bit, considering that deep learning formulas ask for a large number of reports to identify the files faultlessly. On the other hand, in this specific scenario, when the conventional machine-learning method makes use of the established suggestions, the capability will be a great deal far better.

Hardware dependences. The DL algorithm asks for many matrix functionalities. The GPU is primarily made use of to enrich source operations correctly. As a result, the GPU is hardware significant for the DL to operate successfully. DL counts a lot more on high-performance tools together with GPUs than carry out typical machine-learning protocols.

Feature managing. Feature handling is the procedure of placing domain name experience into a feature maker to reduce the issue of the information and produce trends that develop knowing methods operate much better. Component processing is in fact opportunity-consuming and additionally demands targeted know-how. In ML, the majority of the attributes of usage have to be actually identified with a pro and afterward

encrypted as an information kind. Attributes can be pixel market price, shapes, structures, web sites, as well as additionally placements. The efficiency of a lot of ML methods depends upon the reliability of the features extracted. Attempting to obtain high-degree components upright coming from details is a considerable variant in between DL and also regular machine-learning strategies. Consequently, DL lowers the attempt of creating an attribute machine for every issue.

Analytical method. When using basic machine-learning protocols to take care of concerns, traditional machine learning normally breaks the difficulty into multiple sub-problems as well as also deals with the sub-problems, inevitably receiving completion products. On the other hand, deep learning advocates straight end-to-end concerns settling.

Implementation opportunity. Generally, it takes several years to educate a DL procedure as a result of the reality that there are numerous requirements in the DL protocol; as a result, the guideline measure gets a lot longer. The best state-of-the-art DL formula, including ResNet, takes specifically 2 full weeks to finish a direction session, whereas the ML guideline takes a reasonably small amount of option, just secs to hrs. Precisely just, however, the evaluation opportunity is especially the contrary. Deep learning algorithms need to have an astonishingly little bit of opportunity to run in the course of the training course of testing.

Matched up to some ML protocols, the exam opportunity improves as the volume of information boosts. Nonetheless, this aspect does surely not associate with all ML formulas, looking at that some ML formulas have quick test possibilities.

Interpretability. Most notably, interpretability is an important consider comparing ML together with DL. DL acknowledgment of handwritten amounts can come close to the requirements of people, an extremely remarkable functionality. Possessing pointed out that, a DL protocol will not tell you why it provides this result.

Originating from a mathematical point of view, a node of a centered semantic network is triggered. Having stated that, just how should afferent neurons be designed and also specifically just how perform these coverings of neurons work together? Thereby, it is challenging to describe simply how the result was produced. Conversely, the machine-learning formula gives explicit plans for why the method decides on, therefore; as a result, it is basic to define the presuming behind the selection.

An ML strategy mostly consists of the adhering to four actions:

- Connect Engineering. Choice as a basis for prophecy (premiums, attributes).
- Choose a suitable machine learning algorithm. (Like distinction formula and even regression procedure, higher difficulty or fast).
- Find out and likewise assess style functionality. (For different methods, assess and select one of the most effective carrying out version.).
- Take advantage of the educated model to identify or even anticipate great beyond relevant information.

The steps of a DL strategy relate ML, yet as mentioned above, unlike machine-learning approaches, its very own component removal is automated rather than a handbook. The model collection is a continual testing method that requires an excellent ML/DL protocol for different objective kinds. There are three sorts of ML/DL techniques: managed, unsupervised, and also semi-supervised. In monitored understanding, each situation's negative aspect- consists of an input sample and also a tag. The monitored understanding method evaluates the training reports as well as additionally makes use of the end outcomes of the analysis to map new scenarios. Unsupervised uncovering is a machine-learning task that rationalizes the review of shock designs coming from unlabeled relevant information. Because the example is unlabeled, the accuracy of the formula's result may definitely not be actually

examined, as well as merely the critical attributes of the info may be recapped and also described. The semi-supervised finding is a method of mixing very closely seen understanding alongside unsupervised discovering. Semi-supervised understanding utilizes a significant quantity of unlabeled details when using pinpointed files for trend recognition. Taking advantage of semi-supervised recognition may decrease tag efforts while achieving higher reliability.

Frequently made use of ML procedures include as an instance KNN, SVM, Decision Vegetation, and additionally Bayes. The DL design includes for instance DBM, CNN, and also LSTM. There are considerable amounts of specifications consisting of the wide array of finishings and also nodules to pick, but also to enhance the variation and also blend. After the guideline is, in fact, complete, there are alternative designs that must be analyzed in several aspects.

The assessment version is an integral part of the machine-learning goal. Various machine-learning objectives possess an assortment of exam signs, whereas the same form of machine-learning purposes similarly has numerous analysis signs, each along with several emphases like distinction, regression, clustering.

IV. DEEP LEARNING IN BIG DATA

Deep Learning as well as Big Data are 2 high-focus places of document scientific investigation. Deep learning process extraction challenging records types, using a hierarchical finding process with examining as well as understanding significant quantities of unsupervised records (Big Data). This makes it a very favorable tool for Big Data Analysers.

Big Data has 4 necessary qualities, such as Quantity, Variety, Speed as well as additionally Sincerity. They are Uncovering methods are commonly thinking about problems connected to Amount and likewise Array. Deep Learning process deal with large volumes

of records, i. e. Volume whereas shallow learning methods knock off to recognize intricate data patterns which are unavoidably current in large details selections. Additionally, Deep Learning handles analyzing attacking details shown in different formats from various sources, i. e. Wide array in Big Data. This decreases the need for input coming from human experts to secure functions stemming from all brand new data types found in Big Data.

Semantic Indexing, Data Tagging, and additionally Swift Information Retrieval are the primary objectives of Deep Learning in Big Data. Think about records that are disorganized as well as additionally cluttered. Haphazard storage space of big volumes of records can easily certainly not be made use of as a resource of recognizing taking into consideration that looking into such info for particulars targets of interest and also retrieving all appropriate as well as also similar appropriate info would surely be a troublesome duty. Using Semantic Indexing as well as additionally File Tagging, we determine trends in the connections in between expressions along with concepts based upon the guideline that words utilized in the similar scenario have comparable relevances. The comparable words may then be secured close to each other in the mind. This aids our company's current records in an extra comprehensive fashion and aids in reinforcing performance. A direct result of such a kind of keeping will surely be actually that internet search engine will certainly operate quicker as well as additionally effectively.

V. DEEP LEARNING IN ARTIFICIAL INTELLIGENCE

Artificial Intelligence is the theory as well as the progression of personal computers that are capable of doing duties which humans can. Deep learning shows the primary quantity of efforts in the direction of attaining this task. It is made use of in graphic impression, speech awareness, computer game having a good time, expert systems, decision-making, drug, air

travel as well as likewise translation in between languages.

In the activities industry, an AI might be helpful as our professionals could have a 'game bot' stand up as an opponent when an individual player is certainly not obtainable. Our provider could also possess deep learning methods that recommend only how the enemy creates could be tactically placed in the field to get a variety of levels of challenge. The military in addition to air travel fields can easily take advantage of Artificial intelligence to arrange relevant information referring to skies internet visitor traffic and afterward supply their flies along with the best techniques to steer clear of the internet site web traffic. A clinical facility can use Expert system tools to organize bed routines, crew rotations as well as likewise source scientific information

VI. CONCLUSION

Deep learning is a swift increasing therapy of machine learning The fast use of the procedures of deep learning in different regions most definitely reveals its effectiveness and also ease. Achievements as well as boosted preciseness expenses along with deep blue sea learning accurately exhibits the importance of modern-day technology, plainly highlight the development of deep learning along with the tendency for the potential development and also study. Augmentation- ally, it is incredibly vital to highlight that the power structure of layers and additionally the direction in knowing are the major crucial components to develop a productive treatment together with deep learning.

VII. REFERENCES

- [1] R. P. Lippmann et al., "Evaluating intrusion detection systems: The 1998 DARPA off-line intrusion detection evaluation," in Proc. DARPA

- Inf. Survivability Conf. Expo. (DISCEX), vol. 2, 2000, pp. 12–26 .
- [2] M. Tavallae, E. Bagheri, W. Lu, and A. A. Ghorbani, “A detailed analysis of the KDD CUP 99 data set,” in *Proc. IEEE Int. Conf. Comput. Intell. Secur. Defense Appl.*, Jul. 2009, pp. 1–6.
- [3] G. Meena and R. R. Choudhary, “A review paper on IDS classification using KDD 99 and NSL KDD dataset in WEKA,” in *Proc. Int. Conf. Comput., Commun. Electron.*, 2017, pp. 553–558.
- [4] V. Bolón-Canedo, N. Sánchez-Maróño, and A. Alonso-Betanzos, “Feature selection and classification in multiple class datasets: An application to KDD CUP 99 dataset,” *Expert Syst. Appl.*, vol. 38, no. 5, pp. 5947–5957, 2011.
- [5] S. Lakhina, S. Joseph, and B. Verma, “Feature reduction using principal component analysis for effective anomaly-based intrusion detection on NSL-KDD,” *Int. J. Eng. Sci. Technol.*, vol. 2, no. 6, pp. 3175–3180, 2010.
- [6] Sugandhi Maheshwaram, “A Comprehensive Review on the Implementation of Big Data Solutions”, *International Journal of Information Technology and Management* Vol. XI, Issue No. XVII, November-2016,
- [7] Sugandhi Maheshwaram, “A STUDY ON THE CONCEPT AND EVOLUTION OF MACHINE LEARNING”, *INTERNATIONAL JOURNAL FOR RESEARCH & DEVELOPMENT IN TECHNOLOGY*, Volume-11, Issue-5, May-19
- [8] Sugandhi Maheshwaram, “A Novel Technique for Preventing the SQL Injection Vulnerabilities”, *International Journal of Research and Applications*, Volume 5, Issue 19, July-Sep 2018
- [9] Sugandhi Maheshwaram, “A Study on Security Information and Event Management (SIEM)”, *International Journal of Research and Applications*, Volume 5, Issue 17, Jan-Mar 2018
- [10] Sugandhi Maheshwaram, “Architectural Framework of Cloud Computing Environment”, *International Journal of Scientific Research in Science, Engineering and Technology*, Volume 4, Issue 1, January-February 2018
- [11] Sugandhi Maheshwaram, “An Overview of Open Research Issues in Big Data Analytics”, *Journal of Advances in Science and Technology*, Vol. 14, Issue No. 2, September-2017
- [12] Sugandhi Maheshwaram, “A Study on Vulnerabilities, Applications, Advantages and Routing Protocols in MANET”, *International Journal of Scientific Research in Science and Technology*, Volume 4, Issue 1, January-February 2018
- [13] Sudheer Kumar Shriramoju, "Access Control and Density Based Notion of Clusters", *International Journal of Scientific Research in Science and Technology (IJSRST)*, Online ISSN : 2395-602X, Print ISSN : 2395-6011, Volume 1 Issue 3, pp. 215-220, July-August 2015.
- [14] Sudheer Kumar Shriramoju, “Review on NoSQL Databases and Key Advantages of Sharepoint”, *International Journal of Innovative Research in Science, Engineering and Technology*, ISSN(Online): 2319-8753, ISSN (Print): 2347-6710, Vol. 7, Issue 11, November 2018.
- [15] Sudheer Kumar Shriramoju, “Capabilities and Impact of SharePoint On Business”, *International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT)*, ISSN : 2456-3307, Volume 2, Issue 6, November-December-2017.
- [16] Sudheer Kumar Shriramoju, “Security Level Access Error Leading to Inference and Mining Sequential Patterns”, *International Journal of Scientific Research in Science, Engineering and Technology*, Volume 2, Issue 4, July-August 2016
- [17] Sudheer Kumar Shriramoju, “An Overview on Database Vulnerability and Mining Changes from Data Streams”, *International Journal of Information Technology and Management*, Vol. VII, Issue No. IX, August-2014
- [18] Sudheer Kumar Shriramoju, “Integrating Information from Heterogeneous Data Sources

- and Row Level Security”, *Journal of Advances and Scholarly Researches in Allied Education*, Vol. IV, Issue No. VIII, October-2012
- [19] Sudheer Kumar Shriramoju,, “A Review on Database Security and Advantages of Database Management System”, *Journal of Advances in Science and Technology*, Vol. V, Issue No. X, August-2013
- [20] Sudheer Kumar Shriramoju, “Security Challenges of Service and Deployment Models”, *International Journal of Scientific Research in Science and Technology*, Volume 4, Issue 8, May-June 2018
- [21] Sudheer Kumar Shriramoju, “Cloud security - A current scenario and characteristics of cloud computing”, *International Journal of Research and Applications*, Volume 5, Issue 18, Apr-Jun 2018
- [22] Sudheer Kumar Shriramoju, “SECURITY ISSUES, THREATS AND CORE CONCEPTS OF CLOUD COMPUTING”, *Airo International Research Journal*, Volume IX, Feb 2017.
- [23] Malyadri. K, “Architecture and Components of Cloud-Based ML Framework”, *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering*, Vol. 8, Issue 1, January 2019
- [24] Malyadri. K, “An Overview towards the Different Types of Security Attacks”, *International Journal of Innovative Research in Computer and Communication Engineering*, Vol. 2, Issue 8, August 2014
- [25] Malyadri. K, “Security Threats, Security Vulnerabilities and Advance Network Security Policies”, *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 2, Issue 9, September 2013
- [26] Malyadri. K, “Need for Key Management in Cloud and Comparison of Various Encryption Algorithm”, *International Journal of Scientific Research in Computer Science, Engineering and Information Technology* , volume 1, issue 1, July-August 2016
- [27] Malyadri. K, “Integration of Appropriate Analytic tools towards Mobile Technology Development”, *International Journal of Innovative Research in Computer and Communication Engineering*, Vol. 6, Issue 6, June 2018
- [28] Malyadri. K, “A STUDY ON EXPERIENCES AND LIMITATIONS OF MOBILE COMMUNICATION”, *Alochana Chakra Journal*, Volume VI, Issue VIII, August 2017
- [29] Malyadri. K, “CHALLENGES CONCERNING MOBILE DEVELOPMENT AND MODEL-DRIVEN DEVELOPMENT OF MOBILE APPS”, *Airo International Research Journal*, volume XVI, Nov 2018
- [30] Malyadri, N. Surya Teja, “Related technologies and the role of mobile app development life cycle”, *International Journal of Research and Applications*, Volume 5, Issue 17, Jan-Mar 2018.
- [31] Bhagya Rekha Kalukurthi, “A Comprehensive Review on Challenges and Types of Big Data”, *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 7, Issue 1, January 2018.
- [32] Rakesh Rojanala, “Generic Working of an Artificial Neuron and Its Output Mathematical Representation”, *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 8, Issue 1, January 2019.
- [33] Yeshwanth Valaboju, “A Study on Cryptosystem Types and Cryptographic Principles”, *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering*, Vol. 5, Issue 6, June 2016
- [34] Rakesh Rojanala, “Components of Data Mining and Big Data Analytics in Intra-Data Center Networks”, *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering*, Vol. 5, Issue 7, July 2016

- [35] Rakesh Rojanala, "An Overview of Intrusion Detection System and the Role of Data Mining in Information", *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering*, Vol. 6, Issue 3, March 2017
- [36] Yeshwanth Valaboju, "Capabilities and Key Benefits of Sap NetWeaver Gateway", *International Journal of Innovative Research in Computer and Communication Engineering*, Vol. 7, Issue 1, January 2019
- [37] Rakesh Rojanala, "Machine Learning: Intersection of Statistics and Computer Science", *International Journal of Innovative Research in Computer and Communication Engineering*, Vol. 5, Issue 8, August 2017
- [38] Malyadri. K, "A Review on Radio Transmission Technology and Principles of Wireless Networking", *International Journal of Scientific Research in Science and Technology*, Volume 1, Issue 3, July-August 2015
- [39] BhagyaRekha Kalukurthi, "Data Mining Strategy for Discovering Intriguing Patterns and Challenges with Bigdata for Global Pulse Development", *International Journal of Scientific Research in Science and Technology*, Volume 3, Issue 3, March-April-2017
- [40] Yeshwanth Valaboju, "A Review on The Database Security Requirements and Guidelines", *International Journal of Scientific Research in Science and Technology*, Volume 3, Issue 6, July-August 2017
- [41] Rakesh Rojanala, "Cloud Computing Characteristics and Deployment of Big Data Analytics in The Cloud", *International Journal of Scientific Research in Science and Technology*, Volume VIII, Issue II, March-April 2014
- [42] BhagyaRekha Kalukurthi, "Big Data Classification and Methods of Data Mining, Big Data", *International Journal of Scientific Research in Science, Engineering and Technology*, Volume 3, Issue 5, July-August 2017
- [43] Yeshwanth Valaboju, "IOT Communication Technologies and Future of Internet of Things", *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*, Volume 2, Issue 6, November-December 2017
- [44] BhagyaRekha Kalukurthi, "A Study on The Big Data Characteristics", *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*, Volume 1, Issue 1, July-August 2016
- [45] Bhagya Rekha Kalukurthi, "Security Vulnerabilities, Security Threats, and Advance Network Security Policies", *Journal of Interdisciplinary Cycle Research*, Volume VI, Issue I, Jan-June 2014
- [46] Bhagya Rekha Kalukurthi, "IMPLEMENTATION OF BIG DATA ANALYTICS AND BIG DATAGOVERNANCE", *The International journal of analytical and experimental modal analysis*, Volume VII, Issue I, May 2015
- [47] Rakesh Rojanala, "CLOUD COMPUTING ARCHITECTURAL FRAMEWORK", *Journal of Interdisciplinary Cycle Research*, Volume V, Issue I, Jan-June 2013
- [48] Rakesh Rojanala, "AN OVERVIEW ON CLOUD COMPUTING MODELS AND CLOUD DELIVERY MODELS", *The International journal of analytical and experimental modal analysis*, Volume IV, Issue I, JAN-JUNE 2012
- [49] Rakesh Rojanala, "A COMPREHENSIVE STUDY ON THECHALLENGES OF STREAM DATA MINING AND BIG DATA-ORIENTED STREAM DATAMINING", *The International journal of analytical and experimental modal analysis*, Volume VII, Issue II, July-December 2015
- [50] Yeshwanth Valaboju, "A LITERATURE REVIEW ON NEURAL NETWORKARCHITECTURES", *Journal of Interdisciplinary Cycle Research*, Volume VII, Issue II, December 2015
- [51] Yeshwanth Valaboju, "AN OVERVIEW ON THE TYPES OF PASSWORD AND DOS ATTACKS",

Journal of Interdisciplinary Cycle Research,
Volume IX, Issue XI, November 2018

- [52] Yeshwanth Valaboju, "AN OVERVIEW ON SAP FIORI DESIGN PRINCIPLES AND FIORI ARCHITECTURE FOR ANALYTICAL APPLICATIONS", *The International journal of analytical and experimental modal analysis*, Volume X, Issue IX, September 2018

Cite this Article

Anitha Eemani, "A Study on The Usage of Deep Learning in Artificial Intelligence and Big Data", *International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT)*, ISSN : 2456-3307, Volume 5 Issue 6, pp. 390-399, November-December 2019.
Journal URL : <http://ijsrcseit.com/CSEIT1956105>