Journal of Advanced Research in Embedded System
Volume 7, Issue 1 - 2020, Pg. No. 23-24
Peer Reviewed Journal

Article

Car Investigation by utilizing Machine Learning

Tayyaba H Shaikh[1], Rutuja A Kapote[2], Aliya S Memon[3], Rutuja P Pagar[4]

[1,2,3,4]U.G. Student, Dept. of Computer Dept. of Computer Engg., Sapkal Knowledge Hub Nashik, Maharashtra, India.

I N F O

Corresponding Author:
Tayyaba H Shaikh, Dept. of Computer Dept. of Computer Engg., Sapkal Knowledge Hub Nashik, Maharashtra, India.
E-mail Id:
shaikhtayyaba9299@gmail.com
Orcid Id:
https://orcid.org/0000-0003-4464-7116

How to cite this article:
Shaikh TH, Kapote RA, Memon AS et al. Car Investigation by utilizing Machine Learning. *J Adv Res Embed Sys* 2020; 7(1): 23-24.

Date of Submission: 2020-05-02
Date of Acceptance: 2020-05-20

A B S T R A C T

In a world with technology of an upcoming future of machine working as humans. In this procedure Artificial Intelligence, Machine Learning, Knowledge Engineering plays a crucial function. AI plays a crucial role in today's life and is that the future if upcoming world. Machine learning is that the core part of the AI. In this, using problem classification the matter is recognized and that we have solved this world issue of recognition prediction for Auto Company by utilizing machine learning approach

Keywords: Machine Learning, KNN, Artificial Intelligence, k-Nearest-Neighbour

Introduction

In the Generation where, technology has a great impressions on our lives. Different technologies like Artificial Intelligence, Natural Language processing, Knowledge engineering, Machine learning are playing significant role in leading projects of Growing world. AI is a neighborhood which objects or emphasizes the event of machine that imitate human activity like thinking, reasoning and dealing etc. Machine Learning is an important and core part or an application of ArtificialIntelligence. Machine Learning provides systems the power to mechanically acquire and reform from experiences without being Externally programmed. The most purpose of this system is to make a program which may collect data and obtain trained by itself. In Old days peoples like statisticians and developers worked with one another to predict the longer term or to forecast the failure and success etc. for any product. This use to delay in production and launching the merchandise. Maintaining such work under the changing technology and updating data. The primary aim of this to allow machine or computers learn without human intervention and accommodate accordingly. Machine learning made this simpler and faster. Machine Learning is further classified in 4 paradigms:

Supervised Learning[2,4,5]

During this learning method, All the info used are labeled and therefore the algorithm learns to predict the output from the input file which is additionally labeled. The info being labeled makes this method less difficult and fast to execute. This system completes the given task by first providing the training to them. Each example of this method may be a pair having input value and a desired output value.

UnSupervised Learning

During this method, the info used are unlabeled. Because the data used are unlabeled the algorithm learns to inherit the structure from the input file. This method uses self learning technique during which it determines the features of the input by its own and with not any set of categories are used. It is technique where the training is based on unlabeled data without any suggestion or instruction.

Semi-Supervised Learning[1,6]

This method inherits both supervised and unsupervised learning; in this method the combination of labelled and

unlabeled data is employed. Bit of labelled data and enormous of unlabeled data is employed during the training. Unlabeled data is used with little amount of labelled data to get significant improvement in learning precision.

Reinforcement Learning[7]

It's a machine learning technique that permits a representative to find out in an interactive surrounding by trail and error using response from its own action and events. In absence of coaching dataset it sure to learn from its own events.

Litrature Survey

In this paper, we propose a replacement variable regression technique for financial time series predicting supported knowledge shared from referential nearest neighbours. Our approach defines a two-tier architecture. Within the top tier, the closest neighbours that bear referential information for a target statistic are recognized by utilizing the financial association from the historical data. Next, the longer term status of the target financial statistic is inferred from the heritage of the statistic by employing a multivariate k-Nearest-Neighbour (KNN) regression imitates utilizes the combined knowledge from all applicable referential nearest neighbours. The performance of the planned variable KNN approach is assessed by empirical evaluation of the 9-year SP 500 stock data. The new outcome shows that the suggested approach comes up with increasing forecasting accuracy than the referred unvaried KNN regression.[3]

Methodology

By using the machine learning approach we first collect the data or load the data set for execution. The dataset in.csv file (comma-separated value). After accepting the info set some processing is performed on the info. In processing the irrelevant, redundant, and unwanted data is removed, this process is named data cleaning. The info or information assembled after cleaning is pre-processed and used for execution. And it passed to the machine learning algorithm for execution. After execution is analyzed and showed.

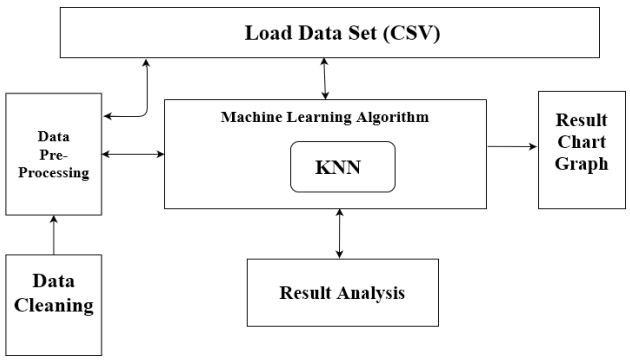

Figure 1.System Architecture

Algorithm: KNN(K – Nearest Neighbor)[8]

KNN has yet one more specialty, it doesn't explicitly undergo training phase or to mention the training phase is minimal and fast. It also means KNN doesn't use training data for generalization and every one this data is usually desirable in testing phase. Thus, KNN is usually referred as lazy algorithm.

Conclusion and Future Work

Machine Learning may be a fast and growing approach to resolve real-world problems. During this paper, we've focused on the supervised learning algorithms like KNN for prediction of recognition on a scaling measure of[1- 4] for a auto company. It'll make the user get the car of their priority of recognition and features along with the budget. We will try to make the prediction more accurate. We can also implement the matter using deep learning and neural network algorithms, as they provide more generalization of problems.[9,10]

References

1. Zhu, Xiaojin. Semi-supervised learning literature survey. 2005.
2. Olsson, Fredrik. A literature survey of active machine learning within the context of tongue processing. 2009.
3. Jiao, Yang, J´er´emieJakubowicz. Predicting stock movement direction with machine learning: an in depth study on SP 500 stocks."Big Data (Big Data), 2017 *IEEE International Conference on.IEEE*, 2017.
4. Kotsiantis, Sotiris B, Zaharakis I et al. Supervised machine learning: A review of classification techniques. *Emerging AI applications in computer engineering* 2007; 160: 3-24.
5. Khan A, Baharudin B, Lee LH et al. A review of machine learning algorithms for text-documents Classification. *Journal of advances in information technology* 2010; 1(1): 4-20.
6. Jiang J. A literature survey on domain adaptation of statistical classifiers. URL: http://sifaka. Cs. Uiuc.Edu/ jiang4/domainadaptation/survey. 2008 Mar 6;3.
7. Kaelbling LP, Littman ML, Moore AW. Reinforcement learning: A survey. *Journal of AI Research* 1996; 4: 237-285.
8. Ban, Tao, Zhang R etal. Referential knn regression for Financial statistic forecasting. In International Conference on Neural information science. Springer, Berlin, Heidelberg 2013;601-608.
9. Yue R, Xiling X, Heng L et al. Quantum Algorithm for K-Nearest Neighbors Classification Based on the Metric of Hamming Distance. NASA Astrophysics Data System (ADS), 2017-11-01.
10. Alsharif MH, Kelechi AH, Yahya K et al. Machine Learning Algorithms for Smart Data Analysis in Internet of Things Environment: Taxonomies and Research Trends. Symmetry 2020; 12(1): 88; Published: 2 January 2020.