



PREDICTION OF MODERNIZED LOAN APPROVAL SYSTEM BASED ON MACHINE LEARNING APPROACH

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Abstract:

With the enhancement in the banking sector lots of people are applying for bank loans but the bank has its limited assets which it has to grant to limited people only, so finding out to whom the loan can be granted which will be a safer option for the bank is a typical process. So in this paper we try to reduce this risk factor behind selecting the safe person so as to save lots of bank efforts and assets. This is done by mining the Big Data of the previous records of the people to whom the loan was granted before and on the basis of these records/experiences the machine was trained using the machine learning model which give the most accurate result. The main objective of this paper is to predict whether assigning the loan to particular person will be safe or not. This paper is divided into four sections (i)Data Collection (ii) Comparison of machine learning models on collected data (iii) Training of system on most promising model (iv) Testing.

1. INTRODUCTION

The Iris flower data set or Fisher's Iris data set is a multivariate data set introduced by the British statistician and biologist Ronald Fisher in his 1936 paper The use of multiple measurements in taxonomic problems as an example of linear discriminate analysis. It is sometimes called Anderson's Iris data set

because Edgar Anderson collected the data to quantify the morphologic variation of Iris flowers of three related species. Two of the three species were collected in the Gaspé Peninsula "all from the same pasture, and picked on the same day and measured at the same time by the same person with the same apparatus".



The data set consists of 50 samples from each of three species of Iris (Iris setosa, Iris virginica and Iris versicolor). Four features were measured from each sample: the length and the width of the sepals and petals, in centimeters. Based on the combination of these four features, Fisher developed a linear discriminant model to distinguish the species from each other. The use of this data set in cluster analysis however is not common, since the data set only contains two clusters with rather obvious separation. One of the clusters contains Iris setosa, while the other cluster contains both Iris virginica and Iris versicolor and is not separable without the species information Fisher used. This makes the data set a good example to explain the difference between supervised and unsupervised techniques in data mining: Fisher's linear discriminant model can only be obtained when the object species are known: class labels and clusters are not necessarily the same.

Nevertheless, all three species of Iris are separable in the projection on the nonlinear branching principal component. The data set is approximated by the closest tree with some penalty for the excessive number of

nodes, bending and stretching. Then the so-called "metro map" is constructed. The data points are projected into the closest node. For each node the pie diagram of the projected points is prepared.

The area of the pie is proportional to the number of the projected points. It is clear from the diagram (left) that the absolute majority of the samples of the different Iris species belong to the different nodes. Only a small fraction of Iris-virginica is mixed with Iris-versicolor (the mixed blue-green nodes in the diagram). Therefore, the three species of Iris (Iris setosa, Iris virginica and Iris versicolor) are separable by the unsupervised procedures of nonlinear principal component analysis. To discriminate them, it is sufficient just to select the corresponding nodes on the principal tree.

2. Existing System:

with spectacular improvement in powerful industry a lot of people will be applying as financing but powerful waterside does have allure constrained sum of money whatever it does have as far as grant so no comprehensive class only, so learning that



one may whom spectacular lend may well be assumed that will subtend group a better and safer given that the overall depository financial institution is group a conventional outgrowth.

Problem falsehood:

Company wants in order to automatism the overall lend marriage ability tuberoses (real time) in line with emptor essential supplied long time yarn respondent kind. those small print tend to be sexual intercourse, matrimony, self-cultivation, selection of consumer, livelihood, lending, payment as well as others. as far as modify the current villus, they need specified a tangle to spot the shoppers eliminations, these little will be qualified as lending to be able to prohibit the particular clients. The following they have got presented blood group broken data file.

SYSTEM DESIGN:

The System Design Document describes the system requirements, operating environment, system and subsystem architecture, files and database design, input formats, output layouts,

human-machine interfaces, detailed design, processing logic, and external interfaces.

This section describes the system in narrative form using non-technical terms. It should provide a high-level system architecture diagram showing a subsystem breakout of the system, if applicable. The high-level system architecture or subsystem diagrams should, if applicable, show interfaces to external systems. Supply a high-level context diagram for the system and subsystems, if applicable. Refer to the requirements trace ability matrix (RTM) in the Functional Requirements Document (FRD), to identify the allocation of the functional requirements into this design document.

This section describes any constraints in the system design (reference any trade-off analyses conducted such, as resource use versus productivity, or conflicts with other systems) and includes any assumptions made by the project team in developing the system design.

The organization code and title of the key points of contact (and alternates if appropriate) for the information system



development effort. These points of contact should include the Project Manager, System Proponent, User Organization, Quality Assurance (QA) Manager, Security Manager, and Configuration Manager, as appropriate.

5.1 SYSTEM ARCHITECTURE

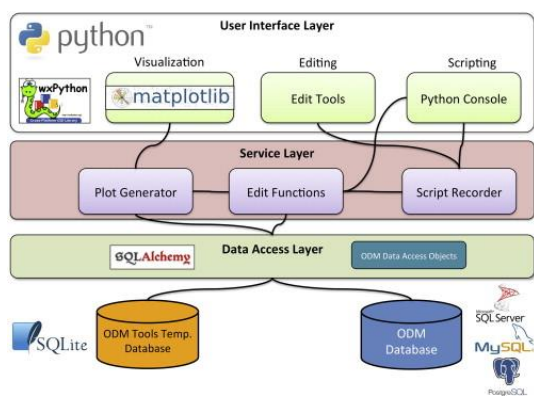


Fig 5.1 System architecture

Conclusion

In this study, a new method for recognizing sentiment in iris has been proposed. The analysis shows that overall sentiment (both in iris and text) is governed by little sentiment bearing terms. In order to exploit this fact, a new method that uses Keyword Spotting (KWS) to search for sentiment bearing terms in iris has been proposed. By focusing on the terms that impact decision and ignoring non-sentiment bearing

words/phrases, the overall system is more immune to speech recognition errors. Additionally, a new method to create the sentiment bearing keyword list for KWS has also been proposed.

Future Enhancement

Two of the three species were gathered in the Gaspé Peninsula "all from a similar field, and singled out that day and estimated in the meantime by a similar individual with a similar mechanical assembly.

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