
LMRIA



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Datasheet

What is LIVRIA ?

LIVRIA is a book recommender. Its purpose is to suggest a list of books that could interest the user. This Recommender System is based on a Machine Learning model in order to create customised lists of books from a list of features provided by the user.

How it works ?

Machine Learning is the science (and art) of programming computers so they can *learn from* data. There are many different types of Machine Learning models and Logistic Regression is commonly used for classification, as it can output a value that correspond to the probability of belonging to a given class (for example : 60% chance of being a fiction reader).

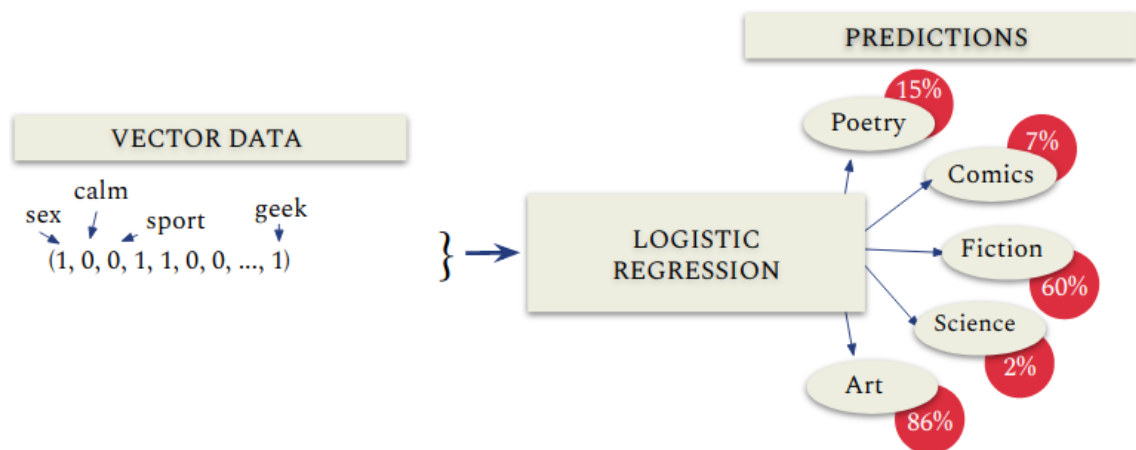


Figure 1: Logistic Regression

Why should you use LIVRIA ?

- **LIVRIA is a powerful tool responding to a real need.**

Have you ever wondered which book will be your next reading? Sometimes it take a while to find a book and it is not always the good one. LIVRIA meets this need with what we usually call *data mining*, this solution is based on more than 6 million ratings attributed by 50,000 users to 10,000 books, so many data that no man would have the ability to make such accurate predictions and recommendations as fine. You will be able to find your next reading in no time!

- **LIVRIA is an application for everyone.**

LIVRIA is not only for people very keen on literature. It is a tool that is made for everyone, young and old, regular readers or not. You can even use LIVRIA without you even like to read, just out of curiosity or to offer a book to a loved one for example. This is the only recommendation system that makes its predictions based on the characteristics of the reader, making it a unique experience for everyone.

- **LIVRIA is a tool developed according to the methods of user-centered design.**

This design method ensures that the tool designed perfectly meets the previously identified needs, by identifying the different types of potential users, and considering possible use contexts. Created by cognitive engineers, LIVRIA was conceived using to this method in order to take into account the need to make it an easy to handle, ergonomic and intuitive.

- **LIVRIA is the most complete recommendation system.**

It is the only recommendation system whose aim is simply to promote literature. Unlike other recommendation systems such as Amazon, Netflix or Spotify, LIVRIA has no economic focus, we are not trying to sell you books but simply to open a field of literary discoveries that suits you. We combined the power of two machine learning models by first using *logistic regression* to get the first predictions done, and then once you've assigned ratings on books, we use *collaborative filtering* to make recommendations better each time you use LIVRIA.

The result

Here is the form taken by the suggestions made by LIVRIA. Obviously, the list of recommendations can be much longer than this one.

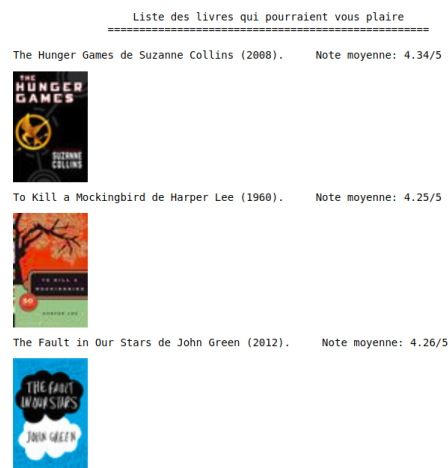


Figure 2: Example of suggestions

Requirements

To use LIVRIA, you will need to install Anaconda and its libraries, including Jupyter which is the environment in which our application is deployed.



Figure 3: Requirements